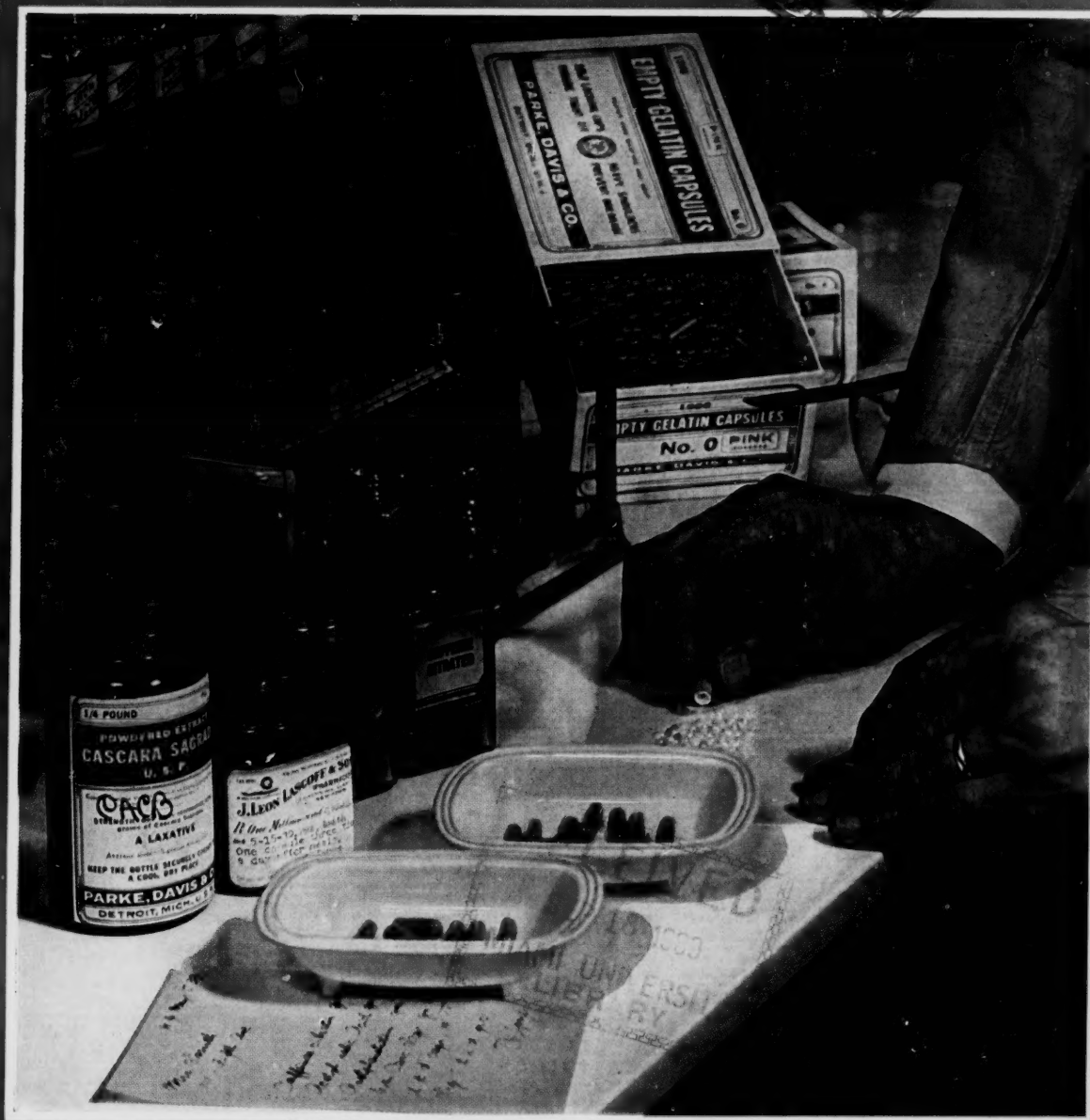


MODERN PACKAGING



SEPTEMBER 1939



I'm just as strong for playing safe as you are. But we are able to carry fewer unfilled containers this year because American Can's facilities are behind us. You see, they keep in close contact with our problems, and they're always ready to deliver what we want when we want it. That kind of service saves us overhead!"



AMERICAN CAN COMPANY, 230 PARK AVENUE, NEW YORK, N. Y.



At the Peak of Goodness a product leaves the plant of the packer. Whether it arrives at the home of the consumer in the same condition is something else again. Much depends upon the package. Packers who send their products to market sealed with Phoenix Metal Caps take no chances.

PHOENIX METAL CAP CO. Plants: 2444 West Sixteenth Street, Chicago; 3720 Fourteenth Avenue, Brooklyn

Modern Packaging

C. A. BRESKIN, PUBLISHER

A. Q. MAISEL, EDITOR

SEPTEMBER 1939

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Published the 1st of each month by Breskin Publishing Corporation, 122 East 42nd St., Chanin Building, New York, N. Y. Telephone Ashland 4-0655. Western office, 221 N. La Salle St., Room 616, Chicago, Ill. Telephone Randolph 6336. Publication office, Twentieth and Northampton Sts., Easton, Pa. Also publishers of Packaging Catalog, Modern Plastics, and sponsors of the Permanent Packaging Exhibit.

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Subscription \$5.00 per year in United States. Canadian, \$5.00. Foreign, \$6.00. Price this issue, 50c per copy. Copyright 1939 by Breskin Publishing Corporation. All rights reserved. Printed in U. S. A. Member of the Audit Bureau of Circulations. Acceptance under the Act of June 5, 1934, at Easton, Pa. Authorized October 7, 1936.



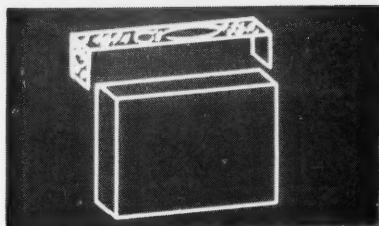
NEXT MONTH

The display-minded will find the second half of the Institute of Package Research's report on its survey of druggists' use of displays, the first half of which appears on pages 61 et seq. of this issue.

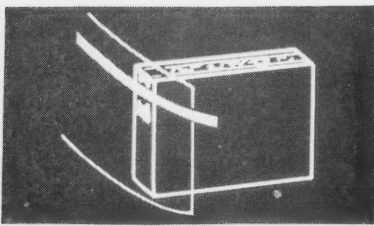
October will also bring a pictorially documented story of what is reported to be the world's largest single soft drink bottling plant—the Pepsi-Cola Works of New York City.

The sales-minded will study avidly the facts and figures in our forthcoming review of the Cannon Mills gift packaging activities.

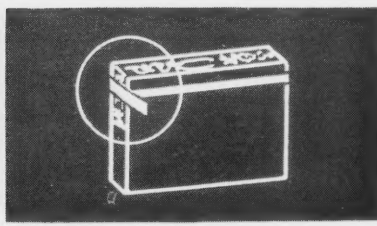
With legislative activity at a standstill, the department "Package Legislation" is omitted from this issue. It will come back to you when the Solons come back.



1. A Government stamp is glued over the top of the package of tobacco, each being fed from a separate magazine.



2. The convenient Easy Opening Tape is cut from a spool and applied to a Cellophane wrapper cut from a roll.



3. The Cellophane is then wrapped around the package with the tape inside and protruding through the seam.

3 Packaging Operations

**DONE ON 1 REDINGTON
FOR U. S. TOBACCO CO.**

Redington packaging machines are designed to do many things well—the U. S. Tobacco Co. equipment is an outstanding example.

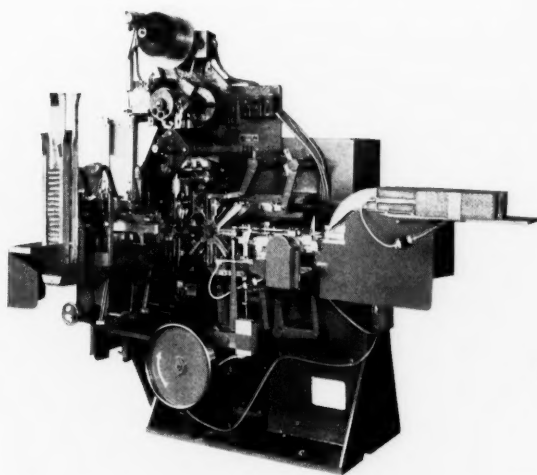
Formerly it took two different machines—one to apply the Government stamp, the other the Cellophane wrapper—and no Easy Opening Tape was used.

A special Cellophane wrapping machine was developed by Redington to do both jobs—then to go one better by adding Easy Opening Tape.

All three operations are done with from 30% to 40% more speed—a remarkable performance in view of the soft, yielding character of the package and its irregular shape before wrapping.

Economy in costs and floor space . . . customer-approval of the package—that's why a large battery of Redington machines now wrap Model, Old Briar and Tweed pipe tobaccos, Right-Cut and W-B Cut chewing tobaccos.

Write us—free of obligation—to show you how Redington's ability to get things done can be applied to your own packaging problems.

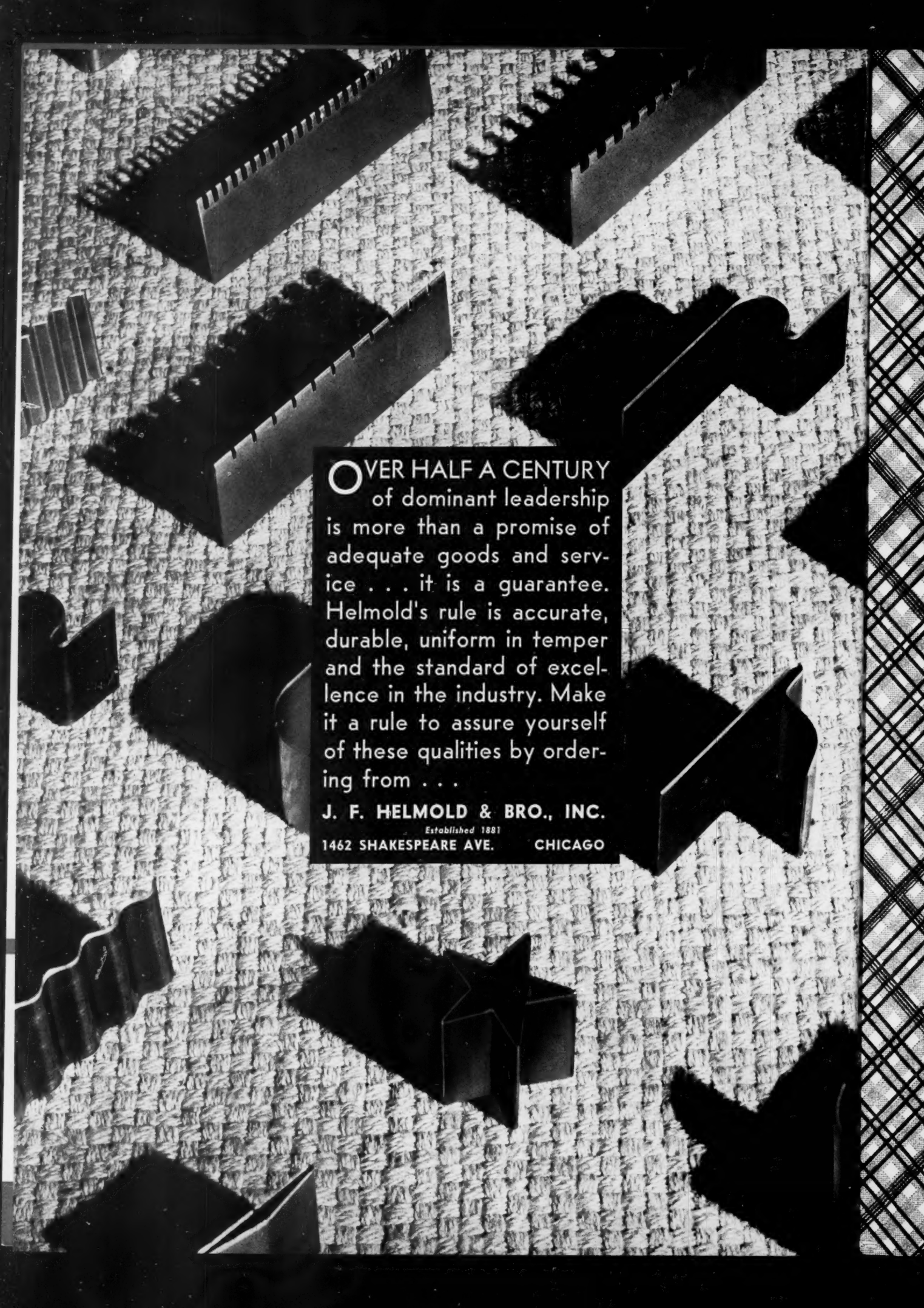


F. B. REDINGTON CO. (Est. 1897)
110-112 So. Sangamon St.
CHICAGO, ILL.

REDINGTON

PACKAGING MACHINES ★

for CARTONING • WRAPPING • SPECIAL PACKAGING

The background of the advertisement is a dense, woven fabric texture. Scattered across this background are numerous dark, metallic extrusions of various shapes, including L-shaped channels, T-shaped profiles, and a star-shaped piece. On the right side, there is a vertical strip with a plaid or checkered pattern.

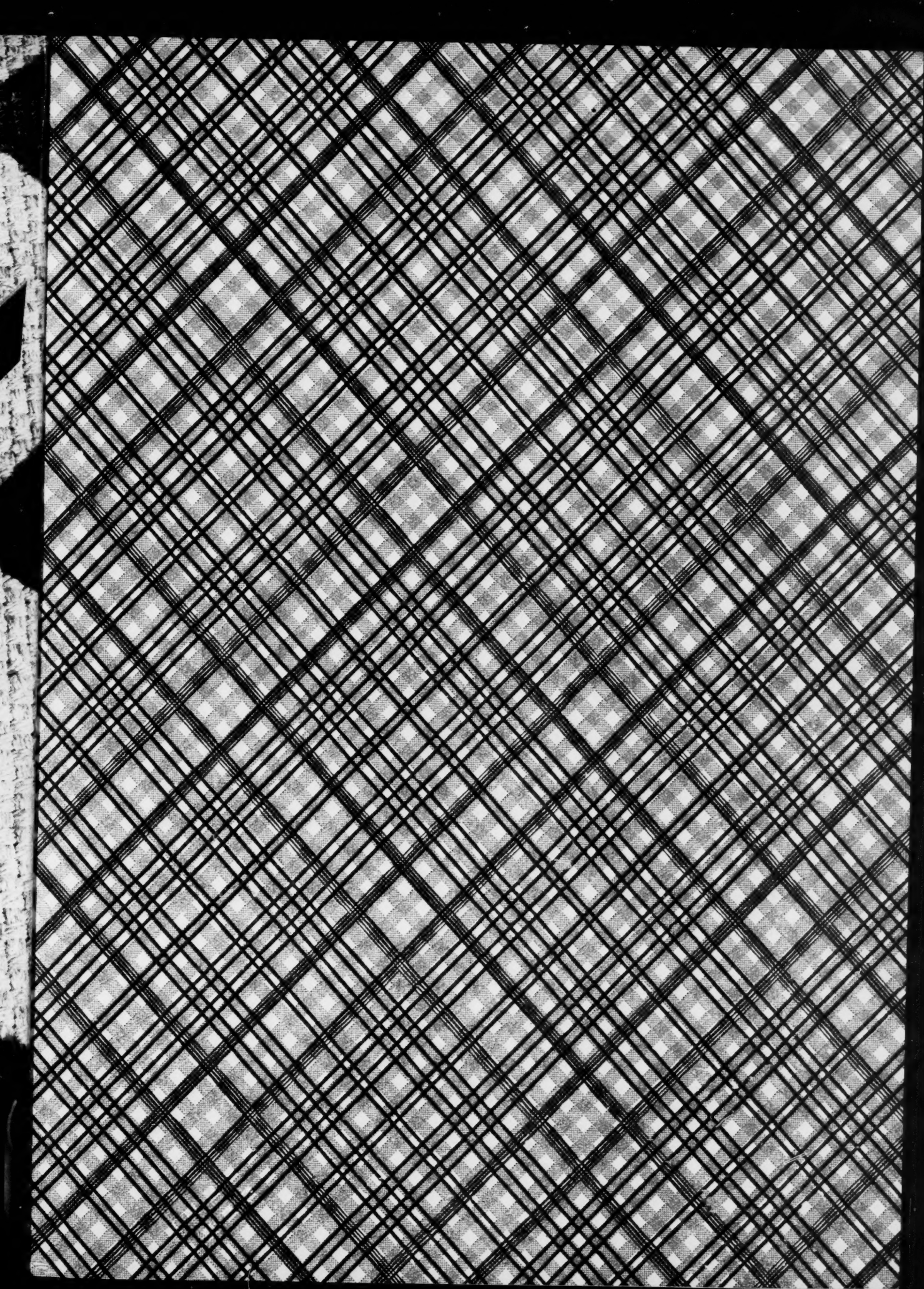
OVER HALF A CENTURY
of dominant leadership
is more than a promise of
adequate goods and serv-
ice . . . it is a guarantee.
Helmold's rule is accurate,
durable, uniform in temper
and the standard of excel-
lence in the industry. Make
it a rule to assure yourself
of these qualities by order-
ing from . . .

J. F. HELMOLD & BRO., INC.

Established 1881

1462 SHAKESPEARE AVE.

CHICAGO



POPULAR PRINT

HIGHTON PLAID

Plaids are in favor this fall and here is a new one - Highton Plaid - in a modern array of effective colors. Send for the new sample book if you haven't yet received your copy.

Working sheets of the entire color range will be gladly mailed you on request.

HAMPDEN
GLAZED PAPER AND CARD COMPANY
Holyoke, Mass.

SALES REPRESENTATIVES

Chicago, Ill. — 500 So. Peoria St.

Philadelphia, Pa. — 412 Bourse B'd'g.

New York, N. Y. — 60 East 42nd St.

San Francisco, Calif. — 420 Market St.

Toronto, Canada — 137 Wellington St. West

Fred'k. Johnson & Co., Limited — 234, Upper Thames Street — London, E. C. 4, England

R. W. Davis — 335 Flinders Lane — Melbourne C 1, Australia

Hamson & Leonard — 101 York Street — Sydney, Australia



Cans That Sell "INSIDE OUT"

There is more than beauty — yes, more than truth in the Keebler tin. There is a superb selling combination of both.

The color photographic design shows the product in all its tempting tastiness — and it does it economically, too — at no greater cost than a solid color design.

Yet the photographic design serves three masters well. It serves the manufacturer to represent

his product truthfully and attractively. It serves the dealer by displaying the goods "buyingly" and makes his shelf space work by compelling attention and creating desire and "self sale." And it serves the consumer by easy pantry identification and constant appetizing suggestion.

The constant effort to build more than "just a container" for our customers, is one of the reasons why sales-minded manufacturers are availing themselves of CROWN CAN COMPANY's services.

CROWN CAN COMPANY • PHILADELPHIA, PA.

Division of Crown Cork & Seal Co.

BALTIMORE

ST. LOUIS

HOUSTON

MADISON

CROWN CANS

I N D E P E N D E N T A N D H E L P F U L

SEPTEMBER 1939

5

Let them tell you about **CROWN CLOSURES**

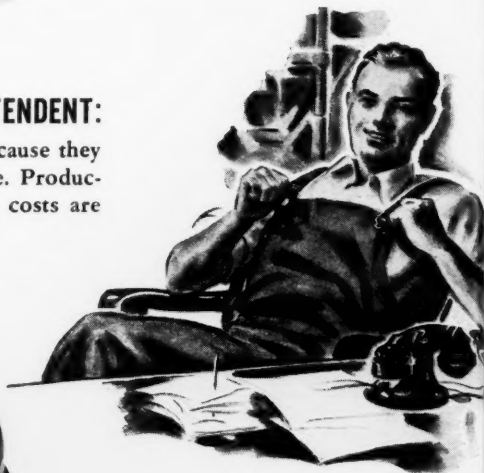


PLANT WORKER:

"I like them because they go on easier."

PLANT SUPERINTENDENT:

"I like them because they give us less trouble. Production is faster . . . costs are lower."



SALES MANAGER:

"I like them because they're always dependable. They keep down returns and complaints from the trade."



THE BOSS:

"I look on them as a sort of insurance for our reputation and our profits. Experience has taught me that the best closures really cost less in the long run."



THE CONSUMER:

"I like the products with caps that are easy to get off and are easy to put on again."



CROWN CORK & SEAL COMPANY
BALTIMORE, MD.

*World's Largest Makers of Closures
for Glass Containers*

CROWN CLOSURES *cost less in the long run*

AT HOME IN ANY SETTING



The happy faculty of "being at home" is not confined to people. KIMBLE GLASS VIALS, with their lustrous finish and high transparency, have that indefinable "something" which makes them welcome.

Consult KIMBLE *FIRST* on your packaging problem.



• • • *The Visible Guarantee of Invisible Quality* • • •

KIMBLE GLASS COMPANY VINELAND, N. J.
 NEW YORK • CHICAGO • PHILADELPHIA • DETROIT • BOSTON

SEPTEMBER 1939

7



YOU GAIN WITH SIMPLEX BOXES

SAVE TIME — With boxes that are quickly erected!

SAVE STORAGE SPACE — They come to you in the flat!

SAVE IN INVESTMENT — They require no equipment to erect!

SAVE YOUR PRODUCT FROM DAMAGE — SIMPLEX BOXES are extra strong and rigid!

SIMPLEX BOXES are ideal for foods, textiles, shoes, clothing, toys, hardware, cosmetics, confectionery and specialties. Leading manufacturers in each of these lines choose—above all others—the protective, time-saving, space-saving, attractive, and inexpensive SIMPLEX BOXES.

There's a style and size exactly suited for your purpose. A SIMPLEX licensee in your area will bring you all these advantages at low delivery costs. Write today for samples and full data.

SHIPPED FLAT



EASY TO ERECT



A simple bend



An easy turn



Click! It locks into place!

READY FOR USE



WHATEVER YOUR PRODUCT . . . whatever your problems, a suitable one or two piece SIMPLEX box is made to meet your requirements. That is why leading firms in the textile, toy, food, and almost every other industry choose — above all others — SIMPLEX BOXES.

There is a Simplex Licensee in your area. Write for full information.

SIMPLEX PAPER BOX CORPORATION
LANCASTER ● **PENNSYLVANIA**



Trade Mark
 Made Under License In All Parts Of
 The U. S. A. And Canada



Metlak

Reg. U. S. Patent Office

OFFSET SILVER INK

Used to Lithograph this Fancy Wrapper on Litho Coated Paper and cut from 43x63 inch sheet from regular production run.

One Impression produced the Brilliant Result shown which has a Smooth, Opaque Metallic appearance not obtainable with dusted jobs.

Sheets piled without Offset Spray Equipment.

Use of Metlak Silver or Aluminum Ink is Economical because it eliminates Bronzing Operation with all its delays and troubles. Plants not so equipped can do Aluminum Printing with their own presses, and not be obliged to send out or refuse this class of work.

Metlak Silver Ink eliminates dust in your pressroom and Danger from Aluminum Dust Explosions. No free bronze dust on your work to come off in handling or to contaminate contents of packages.

Write for Bulletin No. 29.



POPE & GRAY, Inc.

95 MORTON STREET

NEW YORK

Lithographed in U.S.A.
TRAUTMANN, BAILEY & BLAMPEY
Color Offset Lithographers
13 Laight Street New York

Sold in Canada by
CANADIAN FINE COLOR CO., LTD.
240 Logan Avenue
Toronto, Ontario

MANUFACTURERS OF
HI-GLOSS⁺ OVERPRINT VARNISHES, HI-GLOSS⁺ ONE-IMPRESSION INKS

⁺Reg. U. S. Patent Office



Do Retailers Give YOUR Products Preferred Position?

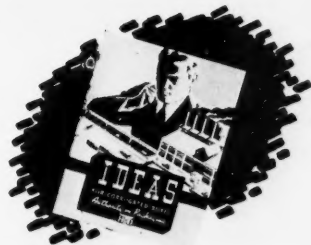
Consider your retailers as good businessmen. Naturally, they give preferred positions on their counters and shelves to the products they think will sell best. Win preferred position for your products by sending them to the retailer in colorful, sales-making H & D shipping boxes. Dealers use them to make attractive floor and counter displays . . . advertising your products at point-of-sale. It will pay you dividends to investigate this idea.

THE HINDE & DAUCH PAPER CO.

3914 Decatur St.

Sandusky, Ohio

FACTORIES IN PRINCIPAL CITIES



Send for FREE PORTFOLIO

"IDEAS For Corrugated Shipping Boxes" may contain just the idea you've been looking for . . . the idea that will mean more advertising, more merchandising and more sales for your product. Be sure to send for your copy today.

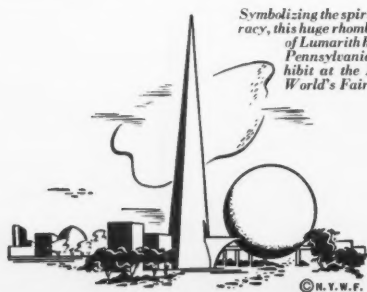
HINDE & DAUCH

**SHIPPING BOXES
MOVE MERCHANDISE**

SEPTEMBER 1939

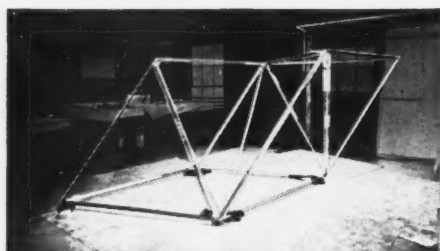
9

Xanti Shawinsky* wanted a Rhomboid Crystal

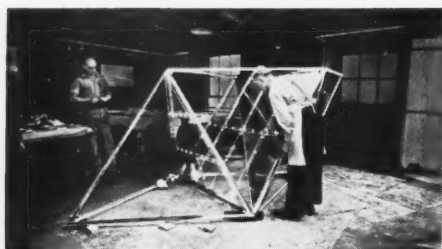


Symbolizing the spirit of democracy, this huge rhomboid crystal of Lumarith hangs in the Pennsylvania State Exhibit at the New York World's Fair.

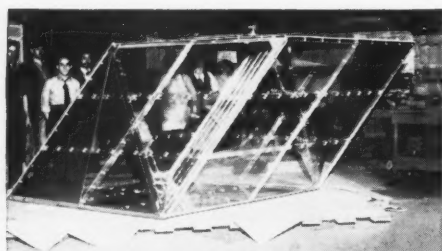
© N. Y. W. F.



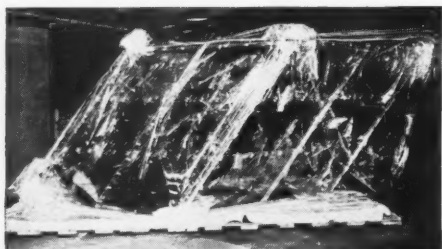
The light metal frame



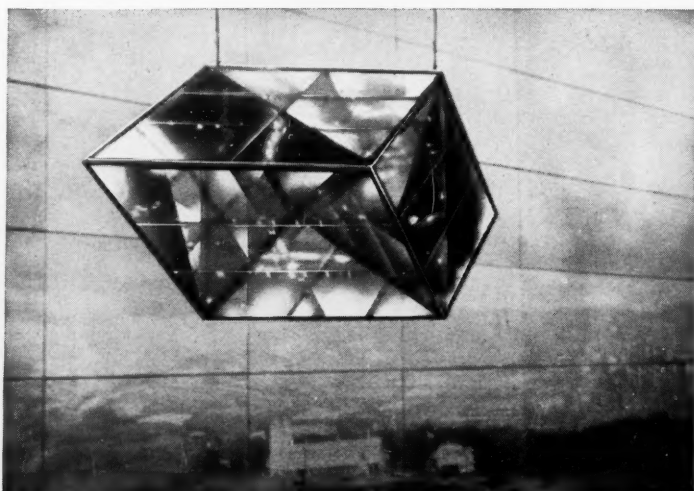
Testing stresses after first Lumarith facets were in place



Finished crystal ready for packing



Wrapped in Lumarith Protectoid transparent foil to protect surface



For use in the Pennsylvania State Exhibit at the New York World's Fair, Designer Xanti Shawinsky specified something that had never been seen before—a huge, transparent, rhomboid crystal. The original intention was to build the crystal of glass.

They told him it couldn't be done

Heroic in concept, Designer Shawinsky's crystal soon proved more than a match for ordinary construction methods. The use of glass was physically impossible because of weight, handling, fabricating time required, and cost. Other materials, other methods were tried—without success.

What happened when he came to Celluloid

At last, Shawinsky brought his problem to Celluloid. Here, at plastics headquarters, Celluloid engineers studied the problem in

detail and said "We can do it."

And they did! Not with materials on hand, of course, any more than John Hyatt first made Celluloid out of a stock formula. But the spirit that gave birth to the world's first plastic was there—a spirit that recognizes no limitations of material as absolute. Our engineers worked out a special formula of clear, sparkling, transparent Lumarith. This was cut into sheets $\frac{1}{4}$ " thick, which were then attached to the metal frame with plastic screws.

The finished crystal is now on view at the Fair. In it you will see not only an inspiring modern design—but an example of the zest for achievement that gets things done at Celluloid—the desire and will to give customers the plastic material they want!

CELLULOID CORPORATION
10 E. 40th ST., NEW YORK CITY
Established 1872. Sole Producer of
Celluloid and Lumarith
(Trademarks Reg. U. S. Pat. Off.)

* In charge of Designing, Jenter Exhibits and Displays Company.

LUMARITH

REG. U. S. PAT. OFF.

When you think of plastics, think of headquarters—"the Granddaddy of them all"... and...

Get in touch with
CELLULOID

also Headquarters for
Transparent
PACKAGING MATERIALS

● Going to the New York World's Fair? Don't forget that one of the points of interest in New York is the Celluloid Showroom at 10 East 40th Street

THE ALL-AMERICA PACKAGE COMPETITION
Sponsored by
MODERN PACKAGING
Certificate of Award
for 1938

Presented to **National Can Corp.**

Material Supplier: Ultra Gloss No-Rubbing Floor Wax
Woodbury Cosmetics & Toiletries
Butler Bros. Snow Bird Household Items
United Drug Co. of Canada Ltd. Bachelor Toiletries



Committee of Award

William H. Rouse J. *Edward A. Tamm* *Franklin D. Roosevelt*
W. H. Rouse J. *W. H. Rouse J.* *W. H. Rouse J.*

"NATIONAL" CONTAINER SERVICE
carries on - helping merchandise make its way in
the market - poised to meet new problems - lending
vision, experience and skilled hands to Container
achievements that invite both the eye and purse.

Come on and See What "NATIONAL" Suggests!

NATIONAL CAN CORPORATION

SUBSIDIARY OF MCKEESPORT TIN PLATE CORPORATION
EXECUTIVE OFFICES • 110 EAST 42nd STREET • NEW YORK CITY
Sales Offices • Plants • NEW YORK CITY • BALTIMORE • MASPETH, N. Y. • CHICAGO • BOSTON • DETROIT • HAMILTON, OHIO

WARNERCRAFT

THE FINEST WORD IN PACKAGING

Starting from scratch

•

For a manufacturer of metal dog leashes,

•

That had not been previously packaged,

•

We designed a WARNER-CRAFT carton

•

With individual transparent containers

•

That for appearance, display value, strength and cost

•

Has met the manufacturer's enthusiastic approval.

•

Perhaps WARNER-CRAFT Packaging

•

Can re-vitalize a product of yours.

•

At least we might discuss it.

THE WARNER BROTHERS COMPANY
BRIDGEPORT
200 Madison Ave., New York

CONNECTICUT
AShland 4-1195

DESIGN

We maintain full time designers skilled in the art of creating and developing modern packages and displays.



PERFECTION BOX COVERING PAPERS

symbolize the most modern tastes—always in good style—appealing to discriminating users.

They add distinction and sales appeal to already worthy products—you should adopt them for your Christmas and year 'round packages.

We will gladly send you samples, suggestions and prices—just ask for them.



ROYAL PAPER CORPORATION
Manufacturers of Decorative Papers
ELEVENTH AVENUE AND 25th STREET
NEW YORK, N. Y.

This sample PERFECTION BOX COVERING—Metalique Base
Pattern No. 500-A

Time to **RELABEL**
according to the LEA Amendment
means
Time to **REPACKAGE**
with smart modern containers of Celluplastics

LET *Hygienic* SHOW YOU HOW TO KILL TWO BIRDS WITH ONE STONE!

Labelled in process of manufacture, vials or containers of HYCOLOID and CLEARSITE, have a streamlined distinctiveness that will add to the sales appeal of your product.

Besides, these new Celluplastics are 80% lighter than glass, cutting down shipping costs . . . they are unbreakable, which means longer life insurance for your product . . . and they are beautiful, either in transparencies that display your product to best

advantage or in rich colors or combinations of color.

Our brand of "silent salesmanship" through packaging is being employed by many of the biggest, smartest manufacturers in the country. Help your product beat competition . . . see how much repackaging can do to end your sales worries. We will gladly send you samples and all particulars, and our packaging department will be pleased to cooperate in designing containers for your specific program. Drop us a line.



Hygienic **TUBE & CONTAINER CORP.**
EXECUTIVE OFFICES AND FACTORY: 46 AVENUE L, NEWARK, N. J.
N. Y. Sales Office: 626 Fifth Avenue, New York, Tel: CI 6-2425



The closures in the Wheeling Steel containers illustrated above are only a few of many special types for the shipping of foods, paints, oils, drugs, chemicals and other diversified products in many lines of industry.



Modernize Your Package with **WHEELING STEEL CONTAINERS**

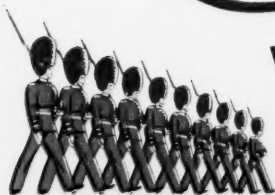
A MORE up to date, more convenient or more durable container may be just the extra value that your product needs for increased sales. Wheeling steel containers lead the field in features which make for greater utility and better protection of contents. Tell us what you pack and we will gladly submit samples and specifications for your requirements.

WHEELING
CORRUGATING COMPANY
General Offices: Wheeling, West Virginia
OFFICES AND WAREHOUSES IN PRINCIPAL CITIES

KEEP YOUR PRODUCTS

On Dress Parade

WITH BAKELITE MOLDED CONTAINERS



(LEFT) Rich red Bakelite Molded stands for tubes of Pinaud's Eau de Quinine Oil provide permanently attractive display. Victor Metal Products, molder. (CENTER) Brisbane "Vest-pocket" dispensing containers of Bakelite Polystyrene offer a new convenience feature in marketing pharmaceutical tablets. Molded by Roland D. Place. (RIGHT) Crystal-clear Bakelite Polystyrene covers with handsome etched effects add quality to Dorothy Gray Cream Concentrate packages. Mack Molding Company, molder.

PERMANENTLY lustrous, colorful and eye-compelling, Bakelite Molded packages and displays keep your products always "on dress parade". On dealers' shelves, and counters, their sparkling beauty dominates attention . . . in users' homes, their enduring richness continues to build good-will for your products until the contents are completely consumed.

Since Bakelite Molded packages are washable, they can be kept immaculate. Since they are readily formed into nearly any shape, they can be obtained in unusual special designs. Since they are resistant to soap, germicides, alcohol and chemicals, they never acquire an unsightly corroded-look. And since they are available in phenolic, urea, polystyrene and cellulose-acetate plastics, they provide the answer to a wide variety of packaging problems.

Many manufacturers have made substantial savings by switching to Bakelite Molded packages for products

with large turnover. You, too, may gain similar important benefits by specifying Bakelite Plastics for your packaging needs. Mail the coupon *now* for complete reference booklet, 8C, "A Guide to Modern Packaging with Bakelite Materials."

BAKELITE CORPORATION, 247 PARK AVE., NEW YORK

BAKELITE

The registered trade mark of Bakelite Corporation, a corporation organized under the laws of the State of New York. The name "Bakelite" is the registered trademark of Bakelite Corporation. Under the license "B" is the registered trademark of Bakelite Corporation.

PLASTICS HEADQUARTERS

Bakelite Corporation, 247 Park Ave., New York
Please send complimentary copy of your hand-book 8C, "A Guide to Modern Packaging with Bakelite Materials."

NAME.....

COMPANY.....

ADDRESS.....



VISIT THE BAKELITE EXHIBIT, HALL OF INDUSTRIAL SCIENCE, NEW YORK WORLD'S FAIR 1939

To All Concerned with Packaging

Package suppliers, package users, package designers,
package machinery manufacturers

The first annual meeting of the Packaging Institute, Inc., will be held in Chicago, October 19 and 20. At this meeting, programs will be developed for each of the divisions of the Institute—the package machinery manufacturers division, the package production division, the package supplies division and, if formed, a designers division.

An invitation is hereby extended to all concerned with the packaging industry, who see in the Institute a potential medium for the solution of industry-wide problems, for the exchange of experience and information and for the research and the public relations work so long needed by the packaging field, to participate actively not only in the forthcoming meeting, but in the preparation of the programs of this meeting.

You are invited to communicate with the secretary of the Institute who will be pleased to acquaint you with the present status of the organization's development and with future plans insofar as they have been definitely formulated.

We urge your fullest cooperation.

For further details address

H. L. Stratton, Secretary, Packaging Institute, Inc.

342 Madison Ave.

New York, N. Y.

(ADVERTISEMENT)

A black and white photograph of a Hershey's Kiss, a triangular-shaped chocolate candy, resting on a glass plate. The plate has a decorative, scalloped edge. The background is dark and textured.

This is
a portion of
a window display
Produced at the Hershey
Brooklyn Plant for the same plates
Creamery Company, Harrisburg,
Penna., lithographed from the actual photograph.
The original art work was a Kodachrome photograph,
posed and supervised by the "U.S." Art Department.

THE UNITED STATES PRINTING & LITHOGRAPH COMPANY
Cincinnati
Brooklyn

production plants at
Baltimore
Erie, Pa.

St. Charles, Ill.

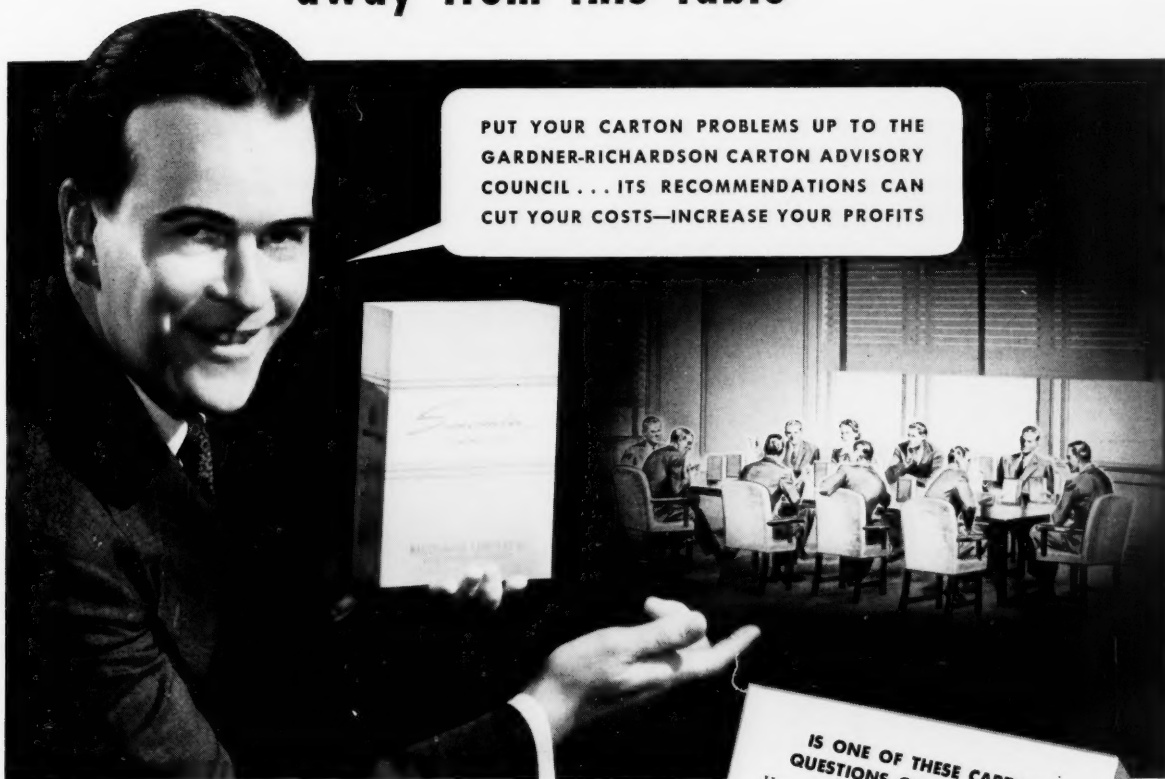
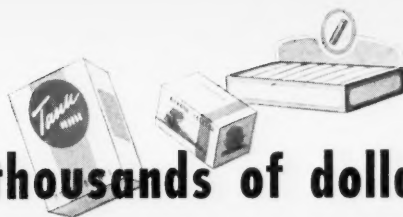
r
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T

So

CARTON USERS:

You may take thousands of dollars away from this table



PUT YOUR CARTON PROBLEMS UP TO THE GARDNER-RICHARDSON CARTON ADVISORY COUNCIL . . . ITS RECOMMENDATIONS CAN CUT YOUR COSTS—INCREASE YOUR PROFITS

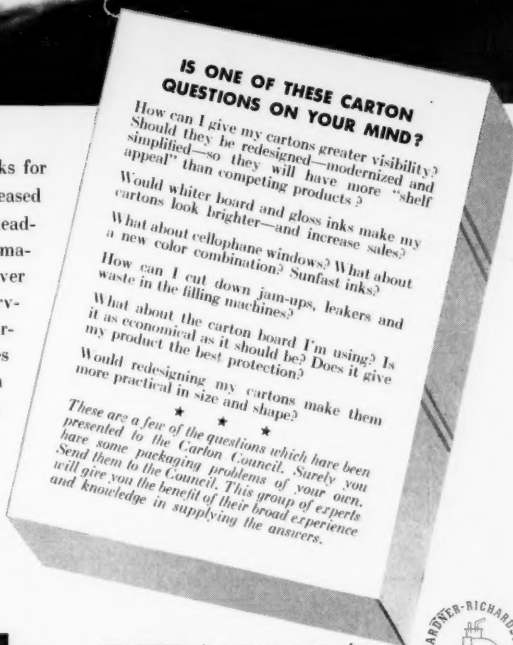
TAKE the carton problem that's on your mind...put it on the table before the Gardner-Richardson Carton Advisory Council. This group of ten specialists—each an expert in his field—will gladly put their 200 years of combined carton experience to work to find the solution for you—*and without obligation.*

Perhaps your carton problem calls for the redesigning of an old package, or designing a new one . . . the

development of new boards or inks for better product protection—increased shelf appeal. Maybe your big headache is high spoilage in the filling machines, costly jam-ups. But whatever your problem is, send it in. The services of these experts and Gardner-Richardson's technical laboratories are yours to find the answer. An answer that may mean thousands of dollars to your company.



WRITE TODAY for "Carton Problem Organizer," which makes it easy for you to organize and present your carton problems to the Gardner-Richardson Carton Advisory Council for expert consideration. This helpful service is yours, without obligation.



IS ONE OF THESE CARTON QUESTIONS ON YOUR MIND?

How can I give my cartons greater visibility? Should they be redesigned—modernized and simplified—so they will have more "shelf appeal" than competing products?

Would whiter board and gloss inks make my cartons look brighter—and increase sales?

What about cellophane windows? What about a new color combination? Sunfast inks?

How can I cut down jam-ups, leakers and waste in the filling machines?

What about the carton board I'm using? Is it as economical as it should be? Does it give my product the best protection?

Would redesigning my cartons make them more practical in size and shape?

★ ★ ★

These are a few of the questions which have been presented to the Carton Council. Surely you have some packaging problems of your own. Send them to the Council. This group of experts will give you the benefit of their broad experience and knowledge in supplying the answers.

The GARDNER-RICHARDSON Co.

MIDDLETOWN, OHIO

Manufacturers of Folding Cartons and Boxboard

Sales Representatives in Principal Cities: PHILADELPHIA • CLEVELAND • CHICAGO • ST. LOUIS • NEW YORK • BOSTON • PITTSBURGH • DETROIT

THIS SYMBOL is your assurance of greater uniformity, higher quality, better appearance, better product protection—profit and satisfaction.



SEPTEMBER 1939

17



AGELESS CORK: In the Tomb of an Egyptian King, scientists recently discovered a pair of cork sandals. Altho buried with the king thousands of years ago, the sandals were still in good condition when found . . . proof of cork's enduring qualities.

Mundet branches and distributors are so conveniently placed as to be neighborly and quick in personal and material service. Call on us for your closure needs

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TOPS in sealing! These Mundet molded screw caps do not chip or crack in use. Complete with the proper cork liner for your product, they guarantee most complete protection and service.



TIME... SEALED...

Time stops (for all practical purposes) when glass packed products have been properly sealed. The bottled contents are protected from deterioration . . . finally used by consumers in that state of perfection which the manufacturer attains after much effort and expense. *As important as the name on the label . . . is the closure that seals the bottle.* On containers bearing important labels, the consumer rightly expects to find proper sealing. You invest in security when you buy Mundet Molded Screw Caps. Their smooth and dependable sealing preserves the perfection of your product . . . builds consumer good will. Instantaneous in action . . . Mundet Molded Screw Caps have super-resilient cork liners, made from corkwood selected by Mundet's own experts in the cork-growing countries. Your phone call or letter brings samples and prices. Ask for them today. Mundet Cork Corporation, Closure Division, 65 S. Eleventh St., Brooklyn, N. Y.

MUNDET CLOSURES

MOLDED CORKS • MOLDED SCREW CAPS • EMBOSSED WOOD-TOP CORKS • CROWNS • PLAIN CORKS

*Ah yes,
the sizzle sells the steak*



but only its taste
can make the diner come back

"Sell the sizzle and not the steak" has become a popular catch phrase, and one with a good deal of merit perhaps. But if you're trying to apply it to your own packaged products — don't forget that a diner may buy a "sizzle" once, but if the steak isn't tender he'll never come back again.

Give your package just as much "sizzle" as you can possibly afford, but if the product within needs any form of protection whatever — be sure to remember that volume business is built on repeat sales, and repeat sales depend on the buyer's opinion of what he finds inside the package. All the sizzle in the world won't bring repeat sales to products that have become soggy, dried out, greasy, mouldy, rancid, broken, or otherwise deteriorated by improper or insufficient protection.

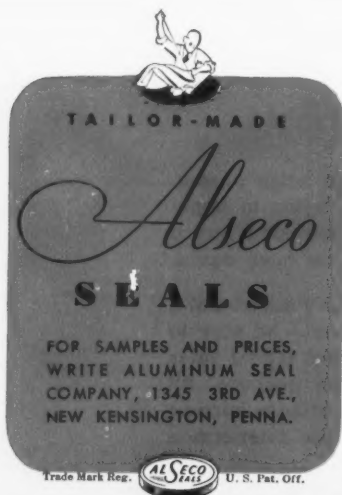
Packaging papers from the Riegel Mills are now providing protection, production efficiency, economy — and sometimes the "sizzle" as well — for countless of the nation's leading manufacturers. If you also need some form of product protection, we sincerely believe that you can solve your problem with one of our 130 standard papers. If not, we are well equipped to economically produce a "tailor-made" paper for you. Write us today.

RIEDEL PAPER CORPORATION
342 MADISON AVENUE NEW YORK, N. Y.

Win with a Triple play



You can win sales with a triple play in closures which will make consumers prefer your product. Alseco Seals set standards in *three* ways. Read about them below. Do you know of any other kind of closure which measures up on *all three* counts?



APPLICATION—Alseco Sealing Machines operate at low cost, perform with faultless precision, give great flexibility in output and sizes. Often cut labor costs.

SECURITY—High sealing efficiency is assured by the Alseco method, a top seal applied with uniform pressure and tailored to fit each container. Leakage and spoilage eliminated.

REMOVAL—Alseco Seals are designed for easy opening and reclosing by users of your product. No tools. No trouble. No rust. No breakage. Every seal builds good will.

AT YOUR SERVICE: 25 YEARS OF EXPERIENCE BUILDING QUALITY SEALS AND SEALING MACHINES

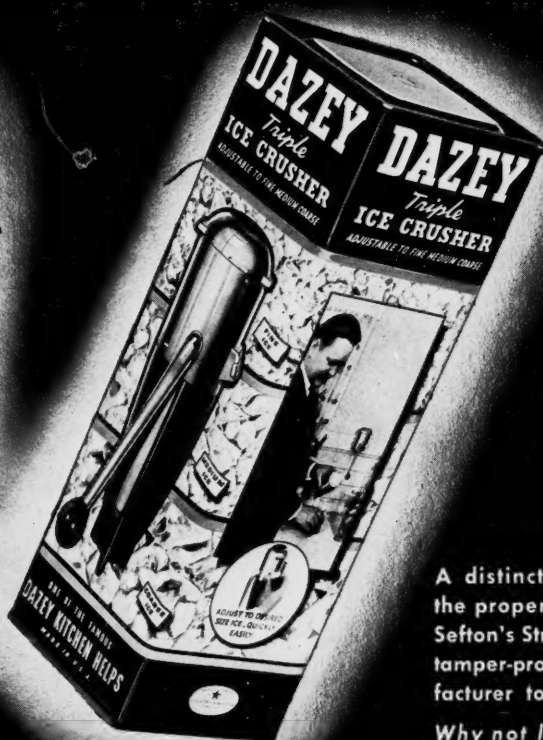


Sefton CAN

DESIGN TO FIT YOUR PRODUCT



Created for
DAZEY CHURN AND MFG. CO.
St. Louis, Mo.



A distinctive product in
the proper surroundings.
Sefton's String Can, sealed
tamper-proof from manu-
facturer to you.

Why not let us redesign
your package to fit
your product?

SEFTON FIBRE CAN COMPANY

Plants—St. Louis, Missouri • New Iberia, Louisiana

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							Houston	Salt Lake City	Seattle



Container Convenience



Sun Tube Unitainers are Amazingly Easy to Open, to Use and to Dispose of When Empty!

TRUE container convenience—from the public's angle—involves a lot of "musts." And Sun Tube Unitainers have just about all of them! They're exceedingly easy to open because (1) they're handy in size; (2) they require no opening tools; (3) they eliminate the need to be opened gingerly—to avoid cutting hands or spilling contents. Unitainers are easier to use, too—the dose is precisely pre-measured. They're easy to dispose of. Just discard anywhere!

Hermetically-sealed Unitainers keep out air, dust, moisture. Your product is 100% protected from the outside damage that *some* containers are prey to. Already, more than 100,000,000 individual doses or applications of nationally-advertised products have been sold in Sun's Unitainers. They can be "tailored to fit" almost any product, as one-shot or introductory packages . . . Write, wire or phone for details concerning Unitainers for YOUR product—today!

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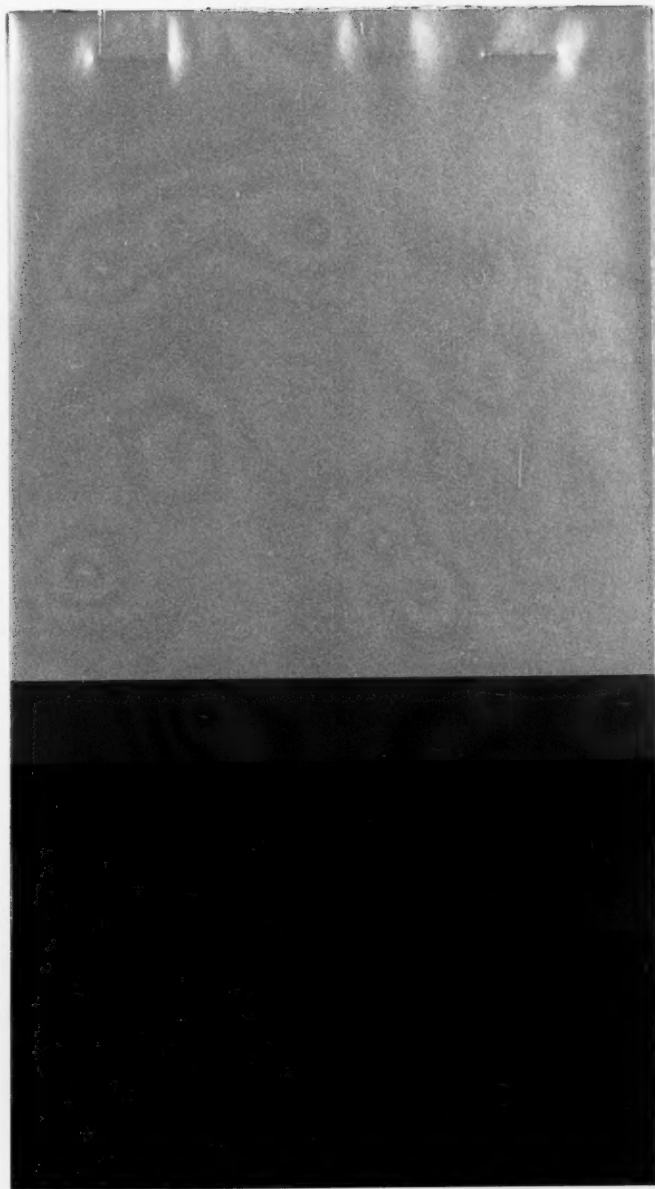
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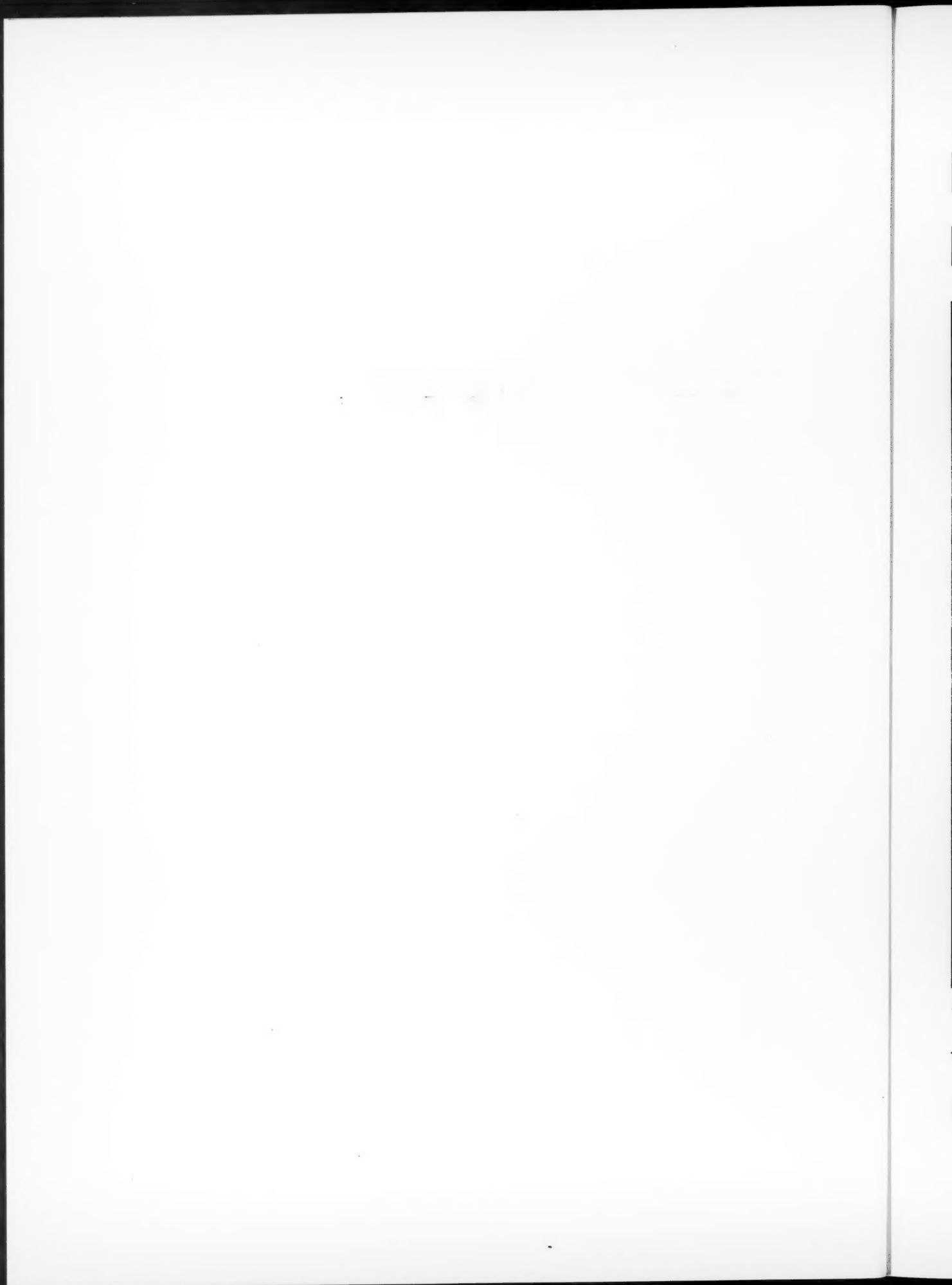
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lustrous finish*



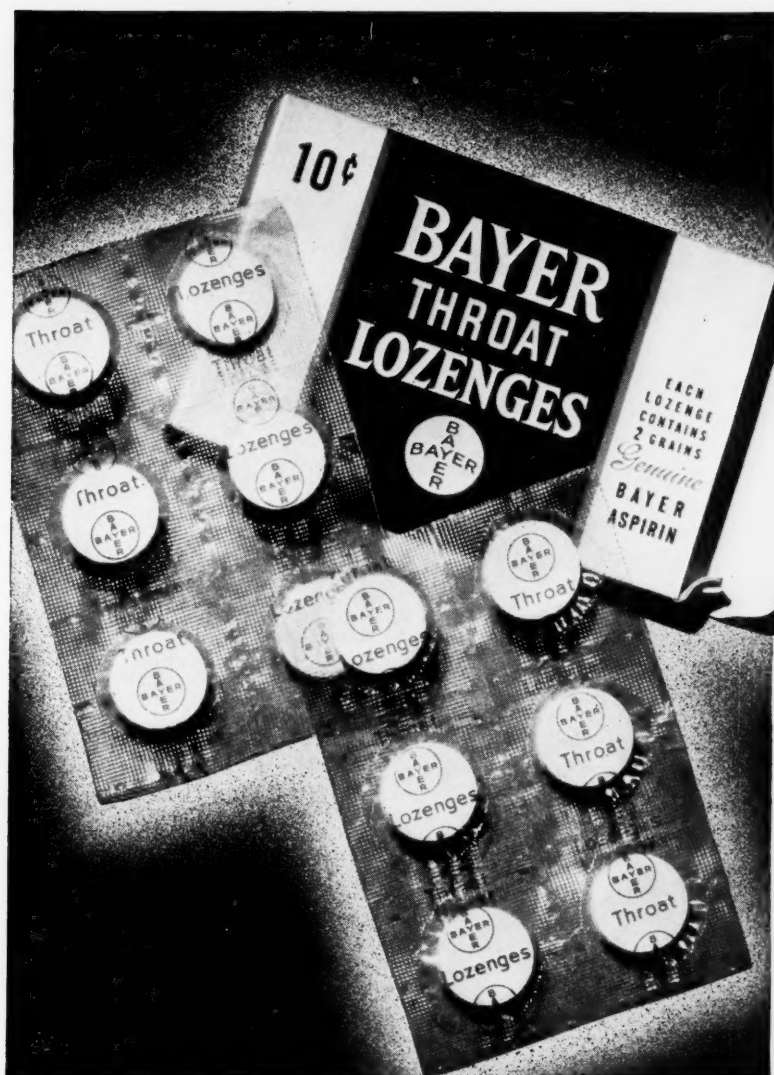
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HOLYOKE

- *Bright*
- *Waterproof*
- *Good for light*
- *Folds well*
- *Lies flat*
- *Easy to use*



NOW *Truly Protective* PACKAGING FOR FINE PHARMACEUTICALS *and all other products whose reputation and efficacy depend upon unvarying high quality*



Bayer Throat Lozenges unit-wrapped in Pliofilm by the Sanitape-Sealtite method developed by The Ivers-Lee Company, Newark, N. J.

THE tablets you see here are *individually* sealed in moisture-vapor-airtight pockets of Pliofilm*—*individually* protected against handling, dust and moisture-absorption until each pocket is separately opened by the consumer.

This unique Pliofilm packaging enhances the appearance of the product, insures absolute cleanliness and safeguards it from loss of strength, efficacy, or flavor.

Plioilm is the only transparent wrapping that offers such complete protection because it far excels other sheet materials in resistance to moisture, tearing and puncturing. It is both odorless and tasteless — and so waterproof it is used for umbrellas!

If your product merits this *unfailing* protection against all possible contaminations, it will pay you to investigate Plioilm. For full information, write: Plioilm Sales Department, Goodyear, Akron, Ohio.

A Centennial Product of The
Greatest Name in Rubber



THE BEST THINGS COME SEALED IN

GOOD YEAR *Plioilm*

*Trade-mark of The Goodyear Tire & Rubber Company

SEPTEMBER 1939

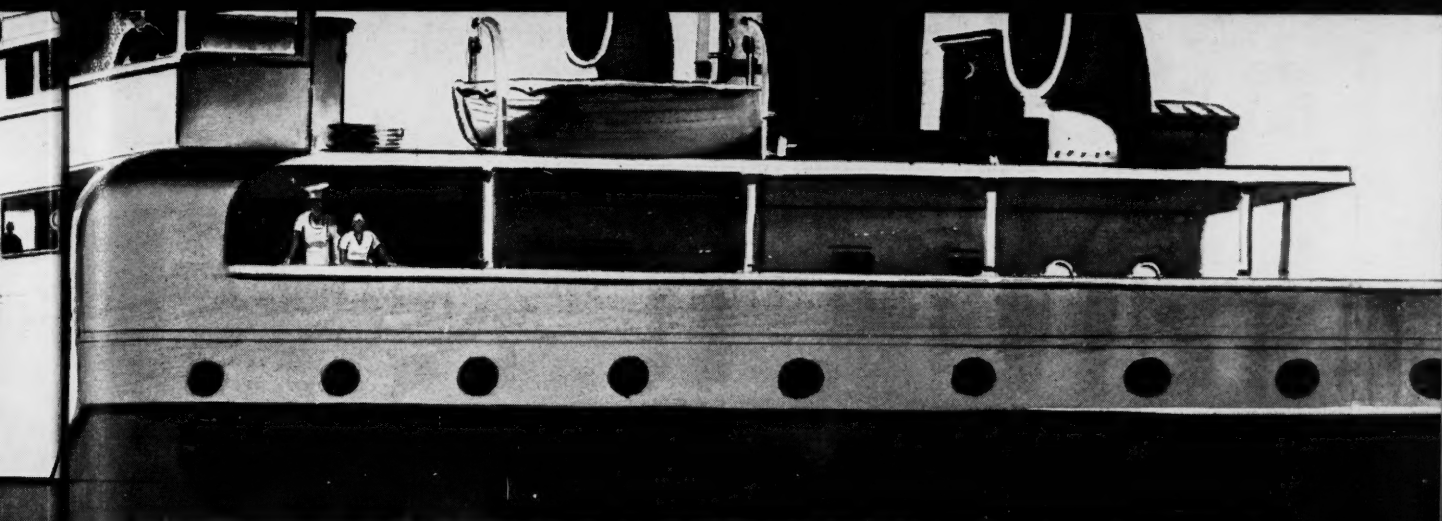
23



COMPLETE RESPONSIBILITY

Off Ambrose Light—the pilot climbs aboard. Through treacherous ever-changing channels, through a maze of lithe vessels, ponderous freighters and darting ferries, he confidently accepts *Complete Responsibility* and, assured by years of continual experience, guides the ship safely into its berth.





● The confidence that comes with years of experience and knowledge, this delegation of *Complete Responsibility*, is basic, too, in the selection of the organization that is to help you in solving your container and closure problems.

Anchor Hocking has had the experience... from container to closure—from eye appeal to carton stresses... they know what will work. Research men, artists, engineers and trained sales representatives can draw from a vast library of experiences. They know where mistakes have been made in the past—how they can be avoided in the future. They know that GLASS is the

ideal package... whether you're repackaging one of your present products or presenting a new product, that glass will do the job quickly, economically and most successfully. They know the short cuts that will save time, save money and pay you greater profits.

These men with their accumulation of experiences and the resources of Anchor Hocking are at your immediate command. Ask us to help you, as we have helped so many others, with their packaging problems. Let us assume *Complete Responsibility*. There's no obligation. Write, wire or phone and this is yours for the asking.

ANCHOR HOCKING PRODUCTS AND SERVICES

P & P WARE
FOOD CONTAINERS
LIQUOR & WINE BOTTLES
BEER AND BEVERAGE BOTTLES
THIN-BLOWN PACKERS' TUMBLERS
GLASS PREMIUM WARE
TABLEWARE
HOTEL, BAR & RESTAURANT WARE
GLASS FOR INDUSTRIAL USES

★ ★ ★
CLOSURES: metal and molded; air-tight and vacuum; friction, screw and lug types

ANCHOR HOCKING GLASS CORPORATION, Lancaster, Ohio
Closure Division: ANCHOR CAP & CLOSURE CORPORATION,
Long Island City, N. Y. and Toronto, Canada

AMERSEAL NOZZLES—for cans containing liquids

AMERSEAL BOXES—for waxes, pastes and semi-solids

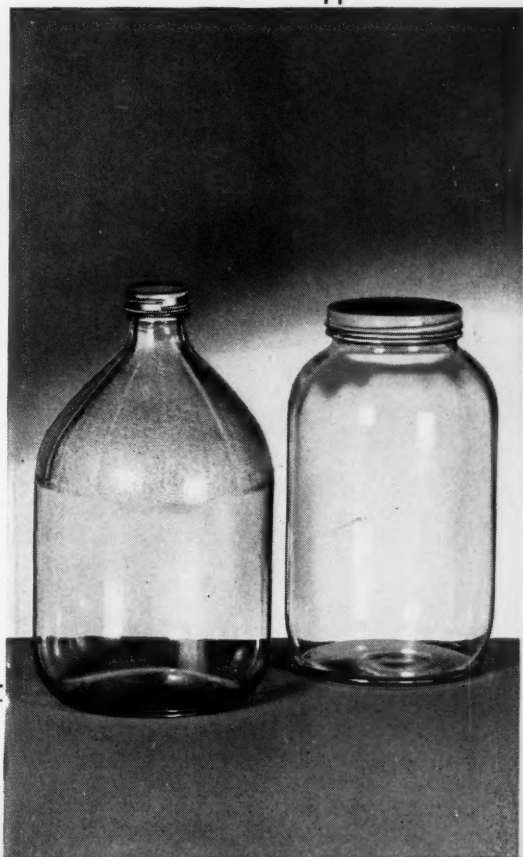
SEALING MACHINES—hand, foot and semi-automatic types

PROCESSING EQUIPMENT—for processing glass-packed products


★ ★ ★
RESEARCH & ENGINEERING STAFF
EXPERIMENTAL & TESTING LABORATORIES
DESIGN SERVICE



ANCHOR HOCKING GLASS
-an unbeatable combination- CAPS



The narrow-neck container is the new mold # 9650. Note the smooth side walls and the stippled surface on shoulders. With a capacity of 105 ounces, it is an ideal large-size package for food products such as juices and other liquids. The wide-mouth jar is mold # 4254, having 100-ounce capacity. Both containers have Anchor Improved C. T. Caps.




What's the
Answer?

**PUT IT IN
CANS!**

*I*t doesn't take an expert to prove that a container which is lighter in weight, sturdier, and more compact in size will reduce shipping costs. Quite naturally, then, you will find your traffic manager suggesting cans as a logical economy move. Many manufacturers have found that in addition to savings in shipping and handling, cans eliminate many of the difficulties of filling, labeling, and packing—thereby speeding up production.

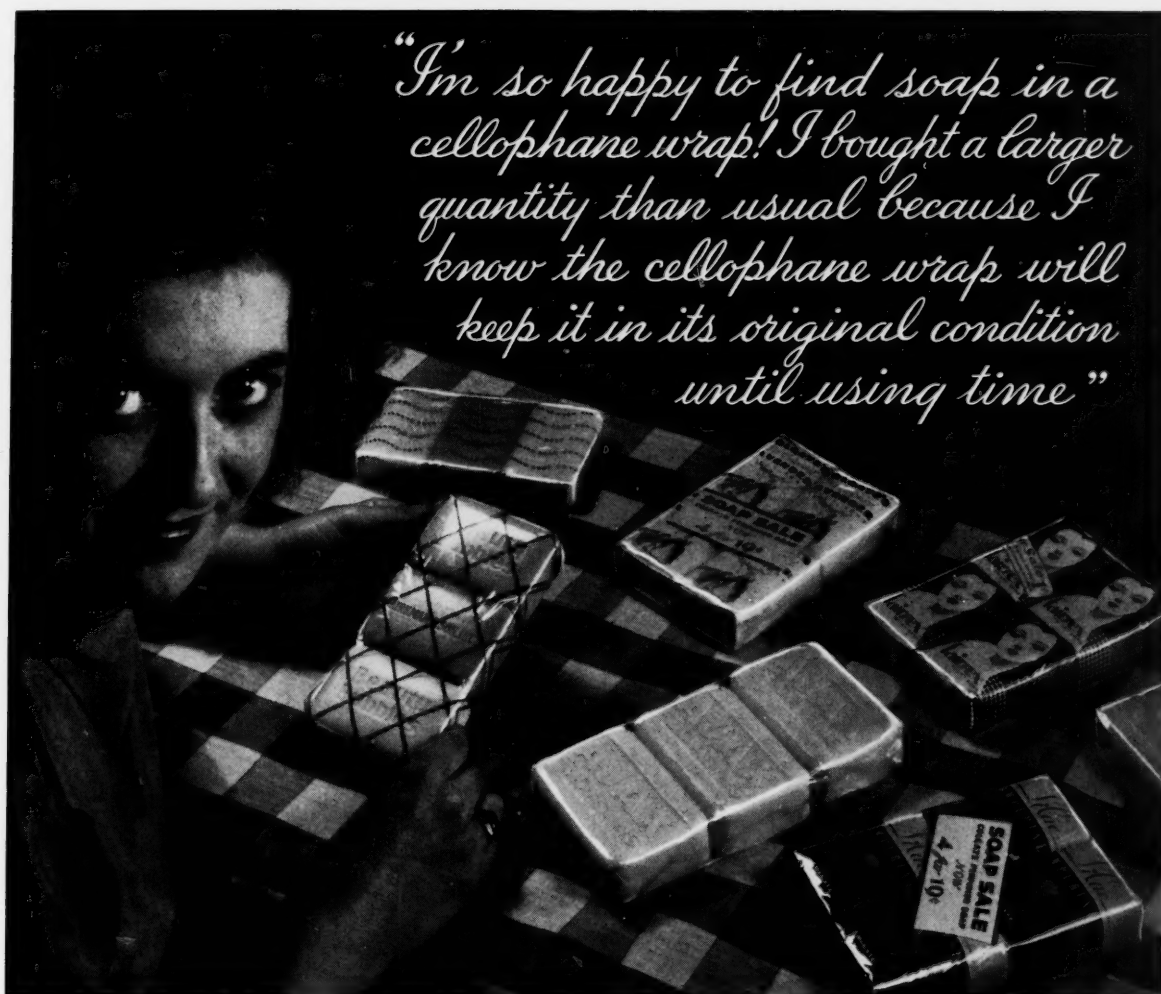
Weigh these advantages carefully and you'll find the answer to your problem by packing your product in a quality can—made by Continental!

 There is hardly a product that wouldn't be more acceptably packaged in a can—although "knowing how" may sometimes be a matter of laboratory research or package design.

Continental offers complete facilities for determining your requirements. Call upon us anytime.

CONTINENTAL CAN COMPANY

NEW YORK • CHICAGO • SAN FRANCISCO • MONTREAL • TORONTO • HAVANA



"I'm so happy to find soap in a cellophane wrap! I bought a larger quantity than usual because I know the cellophane wrap will keep it in its original condition until using time"

... And So the Lady Doubled Up on Her Purchases

AND SHE WAS ABSOLUTELY RIGHT!

The different types of soap illustrated are wrapped in SYLVANIA cellophane.

This in itself is a guarantee to manufacturer and consumer that the product will have full sanitary protection and its original condition—freshness and

aroma—be maintained until using time. SYLVANIA cellophane gives dramatic display to the product and it is also an important factor in sales building.

Whatever your product may be . . . wrap it in SYLVANIA cellophane and look for your customers to double up on their purchases.

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Blake, Moffitt & Towne
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4 Big Advantages behind your Package by Ritchie

1

LARGE SCALE PRODUCTION FACILITIES

All the packages you need — when you need them. One of the country's largest boxmakers, Ritchie has developed methods and machines that meet all production requirements.

2

EXPERIENCE

Ritchie has been manufacturing packages since 1866. And during these 73 years, Ritchie has learned not only how to *make* packages, but how to make *packages that sell!*

3

ECONOMY

Because Ritchie *has* the experience to make the most of its large scale production facilities, your Package by Ritchie has *both* quality and economy.

4

SERVICE

Backed up by all the design and production resources of the home office, the Ritchie sales office nearest you is able to give quick, helpful attention to your packaging needs.

Whether you are interested in a new package — a redesigned package — or just better production of your present package — you may find it profitable to look more closely into the advantages Ritchie offers you. There's no obligation in investigating — write today!

SET-UP PAPER BOXES
FIBRE CANS
TRANSPARENT PACKAGES

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MODERN PACKAGING



1. The old "modernistic" Daggett and Ramsdell packages contrast sharply with the new ones which evidence a distinct baroque tendency.

50 YEARS OLD—AND STILL CHANGING!

Daggett and Ramsdell repackages its toiletry line to catch the spirit of 1890, the year of the firm's birth

Following closely upon a series of recent redesigns of major cosmetic lines, the 50 year old Daggett and Ramsdell line of cleansing creams, face powders, bath oils and colognes has been completely repackaged. The new items will reach the market about the first of October and have all been designed, in the words of Everett W. King, called upon by Daggett and Ramsdell to create the new packages, to reflect "the spirit of the gay nineties, the era in which the line was born."

Although the colorful femininities of the Victorian period have been strongly emphasized, the designer has not departed from modern techniques in design, in provision for production efficiency nor in the use of new materials. Thus, on the cold cream jars, he has solved the problem of label registry, introduced by the use of embossed glass, by designing the jar bottom with two parallel flat bevels. Thus the round jars automatically line up with the proper face forward when passing on the

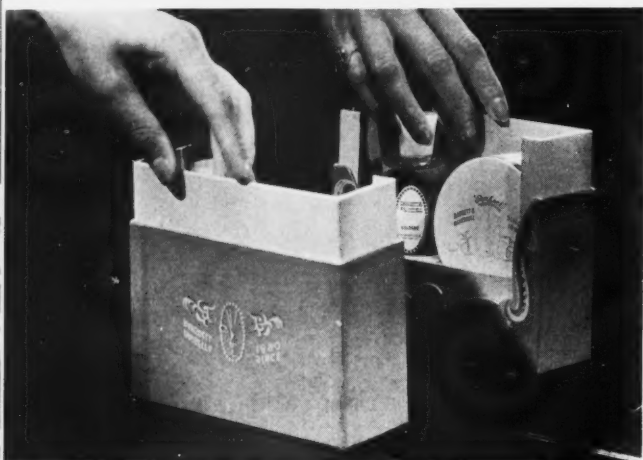
conveyor toward the automatic labeling equipment. For semi-automatic labeling on skin lotion and other bottles, the same problem has been solved by the provision of an embossed arrow on the base of the bottle as a guide to the hand operator. When the arrow stands vertically, the label will register in correct position between the embossed glass decorations.

The cleansing cream is now to be marketed in a jar with an unusually high embossed baroque design on either side of a quaintly bordered label. The metal jar cap of this product is likewise highly embossed and shows the 1890 predecessor of the girl of today, together with the caption: "Daggett and Ramsdell, perfect since 1890."

The new face powder box is enhanced by the same "character" decorative motif, reproduced flat in two shades of gray. This is surrounded by a band of brilliant gold metallic foil around the cover. On the face powder



2



3



4



5

cover, in gold and white, is the same basic design that appears on the cover of the cleansing cream. Both the jar cap and box cover have a solid tea-rose colored background, a color scheme employed on the labels of these two packages. The borders of these labels are a darker shade of rose with shadowed gold spool-beading and gold and black lettering. The new face powder box is considerably larger than the former face powder package.

Designs have also been completed on the other creams in the line which will be introduced in kits and Christmas assortments this fall. They, too, employ the same basic decorative motif, with a change in the cap color and label border for each individual item. Thus, all cold cream caps will be blue; lavender will be employed for night cream caps and turquoise for foundation creams, all in blending pastel shades.

Particular attention has been paid to the designing of the new treatment kits. Thus, the so-called introductory kit is appropriately termed a "sampler." Quaint square flowers and the alphabet, which is part of all samplers, decorate this kit. "Beauty is as beauty does," is the motto on the outside of the samples, so constructed that the Daggett and Ramsdell name, the word "Sampler" and this phrase may all be shown regardless of whether the package is open or closed.

The third kit is more conservative than the two less expensive kits. It is entirely covered on the outside with polished dark simulated alligator skin leather. The only decorative note in this package is struck by two gold rings used to attach the handle to the case. As the case is opened a panel with an oval mirror is automatically raised into position.

(Continued on page 90)

2. Christmas kits in the Daggett and Ramsdell line. The foil covered containers serve as shipping and sales packages as well as counter merchandisers.
3. The box cover may be reversed so that a closed sales package results or an open display as desired.
4. The simulated leather case with a complete set of toiletries. The oval mirror automatically comes up in position when the lid is raised. A view may be had here of the top of the sampler kit.
5. The cover of the sampler set may be reversed to form a display so that the snugly fitted products within the package may be seen.

BUMP-PROOF SHIPPING ROLL

The Behr-Manning Corp. develops a package which fully protects its sandpaper rolls against damage during transit

Perhaps a steel letter file can be dropped out of a second story window without injury, as sometimes claimed. So can a roll of sandpaper, if it should happen to land lengthwise on its side. But the chances are 50 to 1 it will not.

A "Handle with Care" sticker on a heavy roll of sandpaper would appear to be a joke. A happy-go-lucky freight juggler or truckman has an easy way to handle it. Drop it on end, flop it down and send it rolling with a brogan, the same as a roll of building paper. The end always lands on some part of its circumference just as a milk can does. A few inches of edge catch the whole impact. The concrete warehouse floor or freight car floor puts a dent in the round edge as if a sledge hammer had hit it. The next handler may crush the edge at the other end.

These vulnerable edges may seem undamaged when the sandpaper is unrolled. Sometimes the crescent-shaped kinks are scarcely noticeable except to the critical eye of the workman and he has no machine for trimming them.

Damage in transit has been year-round grief to sandpaper manufacturers, distributors and users. To users of drum and belt sanders, these scallops along the edges at regular spaces for 15 ft. to (Continued on page 94)

1. The present Behr-Manning sandpaper package cut away to illustrate the Bulkhead method of packing to offer protection to the ends of the roll. 2. The original method using loose excelsior packing. The turning in of the ends of the wrapping paper pushed the bulk of the excelsior to the center and gave almost no protection at the edge of the roll. Note the damage which extends inward over 25 ft. to 30 ft. of rolled paper. 3. A corrugated carton providing improved but not completely satisfactory edge protection for the roll. Note that only one thickness of corrugated board stands between the edge of the roll and the point of impact.





To the left may be seen the old, special mold 1-qt. extract bottle with its single shell, continuous thread closure and aluminum measuring cap. Through redesign, unnecessary expense is done away with by adopting a combination closure and measuring cap, molded of a transparent amber plastic material. The special mold bottle was replaced by the amber bottle as seen at the right.

REDESIGN REPORT: ROUND 2

Re-examining its improved package, this company found further improvement made possible by advanced molding techniques

The H. A. Johnson Co. supplies foodstuffs and equipment to bakers, manufacturing confectioners and ice cream manufacturers, as well as to such institutions as schools, colleges and hospitals. Most of its products are distributed in bulk containers.

Some nine years ago, in an effort to aid their customers toward the better utilization of flavoring materials, the Johnson Co. adopted a special mold 1-qt. extract bottle. With a single shell, continuous thread closure, this container was topped by a special aluminum measuring cap which threaded on the lower portion of the bottle neck and which was graduated in quarter ounces.

Although this package represented a marked advance in consumer convenience, this gain was accomplished at considerable expense since a special mold bottle and a separate closure, in addition to the jigger cap, were required. In addition, the company felt that an amber bottle would prohibit the passage of undesirable light rays into certain of their products.

Thus, a few months ago, an effort was made to rede-

sign the entire ensemble along more rational lines. An amber container with a single thread on its neck was substituted for the original job and a new combination measuring cap and closure was molded of a chemical-resistant transparent amber plastic. This eliminated the separate closure and jigger and, being transparent, made for easier measuring. The molding material provided a good color match for the amber and thus light protection plus a uniform and more attractive appearance was achieved.

The company reports that the new container has proved itself fully up to expectations. Consumer reaction has proved most satisfactory and the elimination of the extra part has not only resulted in a lower over-all packaging cost, but has simplified bottling and sealing operations and reduced the volume of materials which formerly had to be held in inventory.

Credit: Bottles by the Anchor Hocking Glass Corp. Closures made of Bakelite molded by the Terkelsen Machine Co.

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MODERN PACKAGING

122 East 42nd Street

NEW YORK, N. Y.



MASS PRODUCED HOPPER BOX

Atlas Bolt & Screw Co. first to adopt container produced on can making machinery

Hopper type boxes for the merchandising of industrial goods, hardware and other specialties are not a novelty, but they have fallen very much into disfavor in recent years because the types formerly available were not susceptible to mass production at low costs. Boxes of this sort fell more into the class of store fixtures than into that of unit packages.

Reflecting the renewed interest of the hardware industries in packaging, display and merchandising, there has been much activity in the design of new types of hopper boxes which would overcome previous objections and which, therefore, could be used as the original packages for merchandise. One such box, boasting a number of advantages, reached the market about two years ago. It, however, was limited in that its structure required assembly operations which precluded the possibility of utilizing lithographed metal and it was, therefore, limited to paint spray colors and to attached paper labels for decoration and identification.

A new type of container has now been developed which overcomes a number of the objections to previous types. As adopted by The Atlas Bolt & Screw Co., the first licensee for this container, the unit is rapidly being placed on the market and will eventually be utilized for some two to three thousand different sizes and kinds of materials, with a total annual consumption by this company in excess of one million containers.

The new "Hop-Seal" box starts out in production on regular can making machines which form rectangular can bodies automatically and which can thus utilize lithographed sheet in a manner exactly similar to that followed in manufacturing and decorating an ordinary lithographed can.

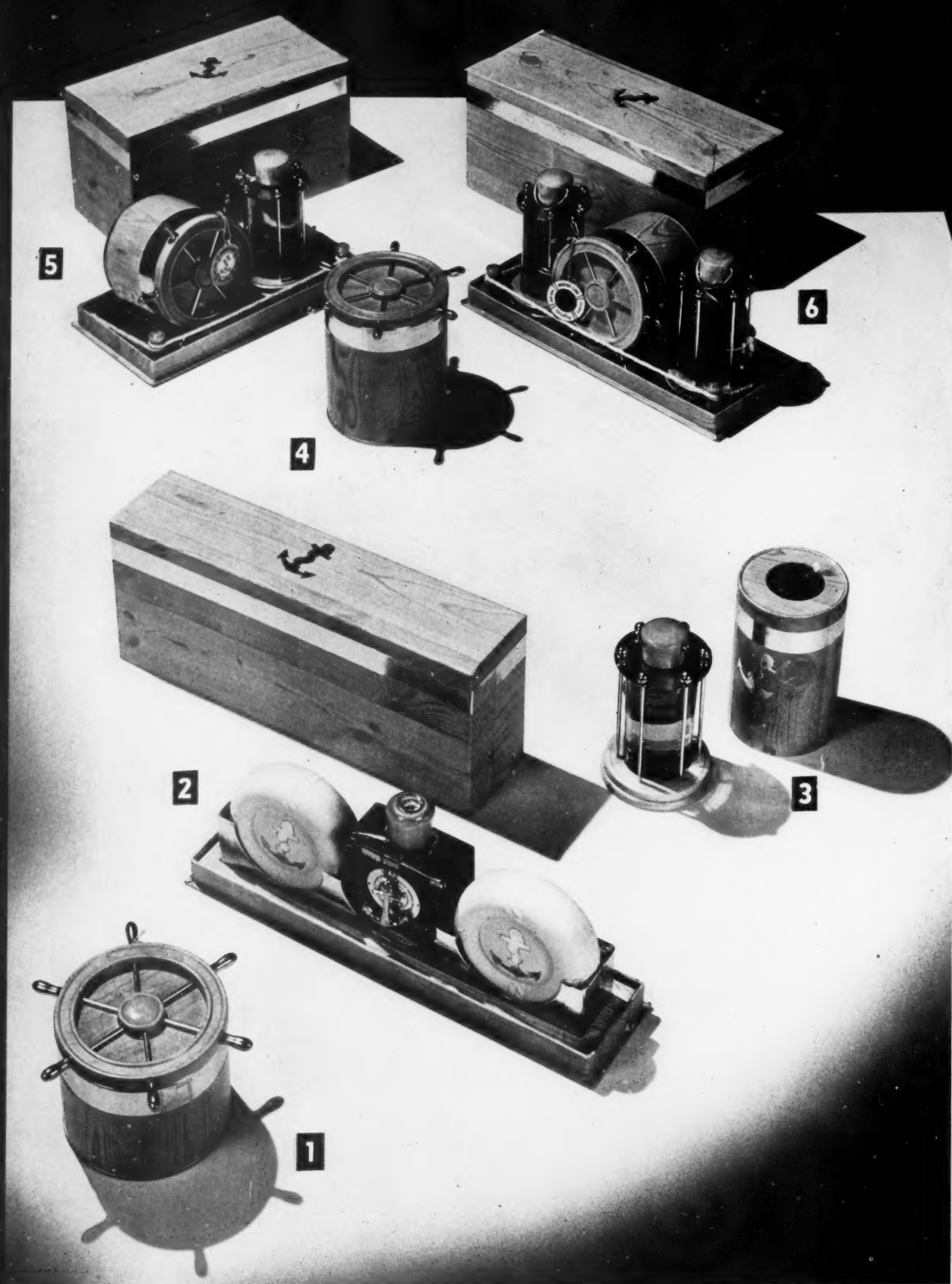
When the cans reach a certain stage, the edge of the open end is curled over to form a bead which strengthens the container and also serves as part of a hinge. The can is then re-formed and embossed on special machines. This operation is claimed to result in a square container many times stronger than the original. Embossing the tops and bottoms of the container permits uniform stacking of the cans.

After the embossing operation, the door, handle and glider are then assembled. One of the interesting features is the method of obtaining a slot for the door wings. Such a slot is necessary to (Continued on page 90)



2

1. The embossed tops and bottoms of the new containers are so designed as to align the front faces of all sizes and to provide for stability when stacked. The method of manufacture permits the use of lithographed decorated metal. 2. Through the use of a simple cardboard insert, slots are secured for the door swings, making for easy closing and preventing jamming by the contents.



1. Dusting powder in a round wooden container topped by a wood and brass fitted pilot wheel which serves as the lid. 2. The "Nor'easter" set offering cologne in a stock bottle with a wooden closure incorporating a miniature compass and two cakes of soap in the shape of a life preserver. 3. Cologne in a container resembling a binnacle lamp, the lid of which is made to simulate wood. 4. The pilot wheel container in a larger size. 5. The "Marine" set which combines dusting powder and cologne. Note how a cord twines around two wooden pins on the base of the display box to further increase the sea-going atmosphere. 6. Another "Marine" set, offering bath oil in addition to dusting powder and cologne. Note how each of these packages are related to the other so that they form an interesting display when grouped together.

No For The Bounding Bath

Allen B. Wrisley Distributing Co. uses a nautical theme to earn display space for its novelty "Marine" line

A toiletry manufacturer, making a bid for holiday patronage, may find himself at a cross-roads of design policy when contemplating the planning of gift presentations. One road may lead to packages, conservative in construction as well as in design, which place major reliance upon the established confidence in the age and reputation of the products to achieve consumer acceptance of the gift presentations. The other road may lead to packages designed for stopping power and impulse sales rather than for reliance upon the product's name value alone, i. e., packages which achieve consumer acceptance through their unique constructions and novel design patterns.

The latter design policy was the guiding principle when Allen B. Wrisley Distributing Co. called upon designer Harry Dearling to devise a family of gift packages for Wrisley bath toiletries. The packages were thus planned not only to appeal to consumers through their novelty, but were to perform a festival function in the store through their ability to establish a special display setting when grouped together as a family. By earning this display grouping of the various allied products, the company felt it would be assured an opportunity to present a complete selection of its gift ensembles and thus to achieve a greater number of sales because of the proximity of one product to the other.

The packages, as finally executed, were planned around a marine basic design. From this nautical plan, unique package constructions were developed which related yet differentiated each product. Thus an integrated family of packages resulted which, when grouped together, formed a striking display on the cosmetic counter.

Wrisley cologne is merchandised in a "sea-going" container which simulates a binnacle lamp. The glass bottle, encased in brass fittings, rests on a wooden base and is closed with a wooden cap. A brass handle completes the authenticity of an actual starboard running lamp. The cylindrical cover which encases the cologne container is designed to simulate wood. It bears a gold foil anchor on its front face and a nautically designed identifying label on its top.

Dusting powder is found in a round wooden container topped with a wood and brass fitted pilot wheel which forms the lid. A gold foil band encircles the neck of the

container to complete the ensemble. Soap is in the form of a life preserver and a gold foil paper anchor is found embedded in the center of each cake.

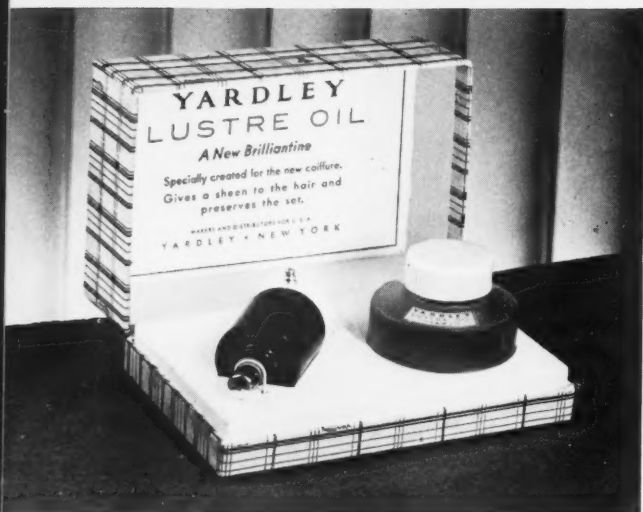
If the binnacle lamp cologne container doesn't appeal, cologne may be had in a stock rectangular bottle. Here a wooden closure is utilized with a miniature compass inserted in the top of the cap. A chain, attached to the bottle neck, bears a brass anchor. The gold foil label with nautical design completes the unit.

The gift combinations are found in set-up boxes which, once again, employ simulated (Continued on page 90)



7. Old fashioned lavender toiletries for women in a set-up box with simulated tweed covering to match the round bath powder box. A copper lid on the powder container makes for rich appearance. 8. "Saddle Club" set for men. Saddle brown set-up box, chrome lid on shaving bowl embossed with horse shoe and bottles with metal stirrups which serve as labels. 9. The "Sea Chest" with authentic lock and key, brass trim and rope handles. The four trays are easily removed from the chest by means of small fabric tabs attached to the tray.

PACKAGING PAGEANT



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1. Yardley & Co., Ltd., in introducing a patented molded plastic atomizer device along with its new lustre oil brilliantine, presents the two in a set-up box with a neat plaid design. The bottle, of frosted glass, is low with a broad base so that the danger of tipping it over on the dressing table is eliminated. A molded closure tops the bottle and a small label, simply designed, identifies the product. Both items rest in die-cut sections provided in the base of the set-up box with hinged lid so that they are held in firm position for shipment or for display purposes. The inner surface of the lid bears the only printed sales message on the package.

2. A desire for individuality of design resulted in a new carton for Pine State butter. In the background is the old stock package as contrasted with the newly developed carton in the foreground. The green pine needles and the brown cones of the pine tree form an all-over pattern on the carton against a white background, the lettering being executed in brown. As compared with the old job, the new carton has added display value and increased "eye-appeal." Designed and produced by The Rike Paper Products Co.

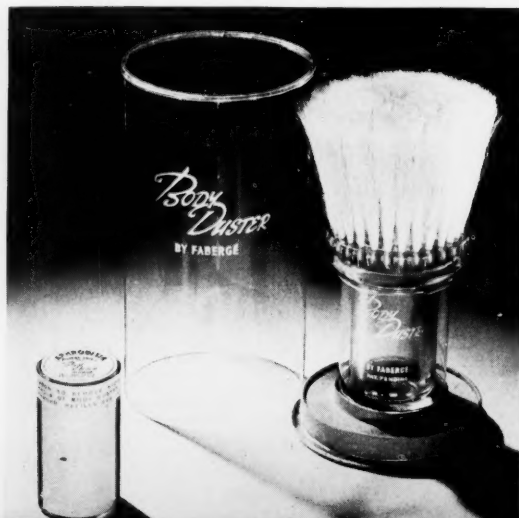
3. To enable their representatives to tell a comprehensive story concerning Century liquors, the Century Distilling Co. has developed this display kit in which each vial, topped by a molded screw cap, contains one of the ingredients which go to make up Century liquors—corn, barley, rye grains, orange peel, etc. Each of the vials is neatly labeled to identify contents. Partitions divide the ingredient kit into individual compartments so that each of the twelve containers rests in its own section. A glove-type button fastener locks the lid in closed position. Vials by the Kimble Glass Co.

4. A new style package has been developed for merchandising Marshall Field & Company's Field-Flight golf balls. The package combines the sales appeal of visibility with the added attraction of a neat carton which protects the balls against handling. The transparent acetate utilized on the golf ball carton enables the consumer to see the major portion of the product. Four of the cartons, each holding three balls, are merchandised in a set-up box. Individual cartons manufactured by the Arvey Corp.

5. The latest bath gadget is a soft dusting brush that feeds itself bath powder through its hollow handle which is perforated like a salt-cellar. The handle, made of Prystal plastics, is easily removed for refilling. Refills are provided in glass cartridges, sold in sets of four. The duster is encased in a transparent cellulose cylinder, setting upright on a Prystal support. Thus the brush is kept clean when on the dressing table and spillage is prevented when packed for traveling. The dusting brush is a Faberge origination. Prystal plastics by the Catalin Corp.

6. Contrast the new Parkleigh razor blade containers with the old packages in the background. Note the uniformity of appearance which has been achieved through redesign and the resulting increased display value. When Gimbel Brothers decided to dress up their razor blade packages, the basic design had to be considered in

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connection with the store's many other drug packages so that a family relationship would be maintained. The side panels of the new containers duplicate the information presented on the cover of the boxes so that if the lid should be destroyed, the name of the store will still be before the user, reminding him of the source of supply for Parkeleigh blades. Color is utilized as a means of identifying the various types of blades. The boxes are supplied with cellophane overwraps. Boxes designed by Gimbel Brothers and supplied by the Imperial Paper Box Co.

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7. Vapoo All-Surface cleaner is a companion product to the Vapoo rug and upholstery shampoo. The design adopted for the rectangular cans for the cleaner is similar to that utilized on the shampoo, so that family resemblance is maintained. The word "Vapoo" is rendered in the same type of lettering as on the shampoo container and is carried in reverse on a band of red. The product name is in reverse on a dark blue band and narrow bands of light blue tie the red and dark blue panels together. A minimum of directions are carried on one side panel and the back panel is given over to an illustration and listing of the product's use, as shown in the illustration to the left. Designed by Arthur S. Allen. Labels by E. E. Brogle & Co., Inc.

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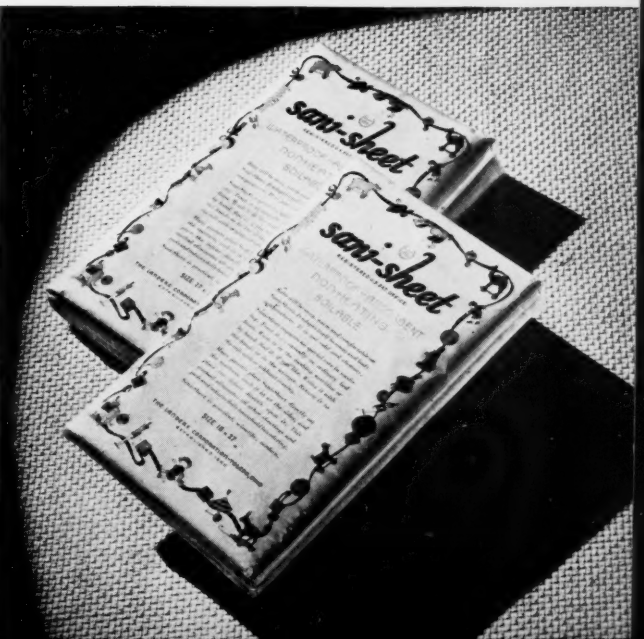
8. With the Food, Drug and Cosmetic Act tightening up on the presentation of label information, C. W. Abbott & Co. not only made the necessary changes in the wording of their label in order to comply with the Law, but cleaned up the general appearance of the label as well. Reluctant to depart from the rendering which characterized the old label design, the new label retains the same color scheme of red, yellow and black. The descriptive copy, however, has been changed to a more modern type face and the Abbott gentleman on the front face of the label has been made to look like a bon vivant of 1939 instead of 1872, the year in which the company was founded. Labels by Oscar T. Smith & Sons. Bottles by the Fairmount Glass Works.

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9. Sani-Sheets for babies, a product of the Landers Corp., are given protection against dust, dirt and consumer handling, while, at the same time, in no way losing the appeal achieved through visibility of the product. A Lumarith Protectoid wrap enables the consumer to see the crib sheets and imprinted on the top surface of the wrap is the complete story about the product. This neat-looking package which safeguards the product would seem to appeal to mothers who particularly desire sanitation in all products used for the baby. Lumarith Protectoid, a product of the Celluloid Corp.

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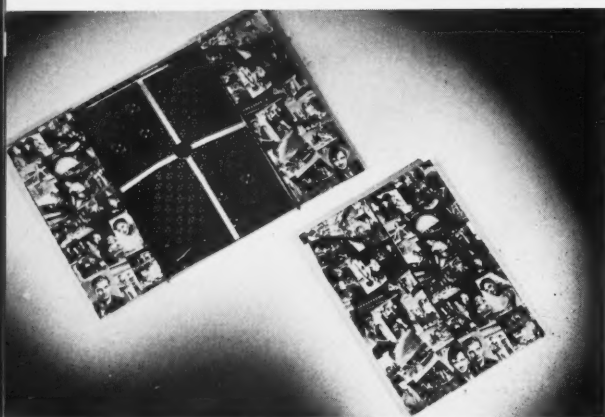
10. The Rex Research Corp. is introducing a line of newly designed metal containers for their Fly-Tox and Stockaid insecticides. The cans are lithographed in red and white and are designed to be used effectively in store displays. The Fly-Tox group in particular has good legibility on the dealer's shelf and lends itself to interesting mass display. Directions for use and information concerning the product are supplied on the side and back panels of the containers. Packages by the Owens-Illinois Can Co.

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11. Through the use of photography, the labels on the cans for State of Maine shoestring potatoes reflect, in life-like reproduction, the appearance and quality of the product within. Thus the consumer can readily see what she is buying. Suggestions for use of the product are presented on the sides of the can labels while the product name is boldly imprinted on the front face. Labels lithographed by the Stecher-Traung Lithograph Corp.

12. Another potato container which likewise enables the consumer to see what she is buying. The Wise Delicatessen Company's Julienne potatoes, however, are merchandised in a thin glass tumbler. The jar in this instance offers not only visibility for the product, but re-use possibilities after the potatoes have been consumed. A simple and well-designed label on the vacuum sealed tumbler completes the package. Jars designed and manufactured by Hazel-Atlas Glass Co.

13. Plenty of American spirit embodied in the Three Cheers Charbert ensemble. Three 1-oz. drumbottles of cologne in three different odors are set in a charmingly conventionalized replica of the White House. The molded caps utilized on the three bottles are red, white and blue, respectively. The base of the container is covered in green to give a suggestion of grass and the bottles are held in die-cut sections. A white set-up box with blue and red trim serves as the shipping and sales package.

14. The Goldman-Sarlow Co. of Hollywood, manufacturers of neckwear under the trade name of Hollywood, didn't have to go far to find a design pattern for its tie and handkerchief set boxes. Universal Studios in Hollywood supplied photographs of cinema actors and actresses which were utilized as a montage on the box coverings, the colors being green, brown, wine or blue. The hinged lids on the container open outward and reveal the continued all-over pattern, thus serving as a nice display setting when open for counter presentation. Box manufactured by the Hollywood Paper Box Co.

15. Temtor strawberry preserves, a product of Fan C Foods, Inc., come to market in stock light weight containers. The light weight feature reduces freight and handling costs while the restrained ornament of the jar makes for neat appearance and ample visibility for the product. Constructional features about this container eliminate unnecessary handling and mechanical care in the packaging operations. The well-defined label space permits the use of almost any type of label, without the necessity of "spotting." The ample base assures stability on the production lines and the sloping shoulders make the filling operation simple. Jars designed and manufactured by the Hazel-Atlas Glass Co.

16. Armour & Co. comes forth with a combination food product package which simplifies picnic preparations. All the necessities for a picnic are contained in a folding carton colorfully designed in silver, red, blue and yellow. The contents rest upon green shredded "grass." The slant-side carton holds a good selection of food items and the die-cut window permits the picnicker to see what is in the package. If all of the contents can't be seen through the window, a listing of the contents is presented on the front panel of the carton. Container by the Michigan Carton Co.

Work in Progress

by PAUL WORK*

A further report of the growing utilization of consumer packs for fruits and vegetables



1-2. A wide variety of products are packed in corrugated kraft folding containers similar to the examples shown above. Note the manner in which visibility is achieved without danger of losing any portion of the pack through the die-cut windows. Note also the sturdy base construction, designed to permit piling without damage to the fruit located at the window openings. Containers by the Gibraltar Corrugated Box Co.

In two monumental surveys, "A \$600,000,000 Laggard," December, 1937 issue; "How Fruits March to Market," January, 1939 issue, conducted for Modern Packaging, Dr. Work discussed the progress which had been made, up to the time of the publication of these articles, in the development and utilization of consumer packages or consumer unit packages for fruits and vegetables. In view of the ever-changing picture presented by this field and of the conflicting reports and rumors which have circulated as to the success or failure of this type of packaging, Modern Packaging has asked Dr. Work to prepare this supplementary survey of achievements—and failures—in the fruit and vegetable field.

A few years ago, ideas on consumer packs for fruits and vegetables found expression only in the studios of designers, in trial runs in factories, and in sporadic experimental use in the trade. Today, these small containers by no means dominate our markets, as is the case

with other commodities, but they are to be seen on many retail stands and they are being packed in thousands of units and shipped in solid car lots.

A single chain warehouse during the past season handled up to 140,000 2-lb. cartons of apples a week.

The 1-lb. window carton for tomatoes carries 80 per cent to 90 per cent of the metropolitan New York distribution of the Atlantic and Pacific stores.

The Waverly Growers Cooperative of Fla. delivers oranges and grapefruit in unit cartons in New York with a very small cost increase over crate shipments.

Mushrooms, particularly from middle Western centers, are now moving largely in paper containers shaped like a berry box and of pint capacity.

Earl French of the Atlantic Commission Co. is confident that consumer packaging is coming as fast as it can with due regard for costs. A major advantage, in his opinion, lies in the fact that it carries publicity through to the consumer, giving effect to advertising campaigns of many sorts. There is no need to have

* Professor of Vegetable Crops, Cornell University.



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3. Half bushel corrugated containers are used by the Georgia-Carolinas Peach Marketing Board. A snap cover, permitting removal and replacement at will, is utilized. In packing, the peaches are inserted from the bottom and the bottoms sealed. Corrugated containers by the Gaylord Container Corp. 4. Small packs for fancy peaches are put up in a cushioning container aptly called the "Wrapak." Containers manufactured by the Marketing Service Co. 5-6. Two display pieces used in conjunction with the bushel baskets in this peach campaign. The larger unit is designed for floor or window use. The smaller unit fits onto the rim of the bushel basket. Note trade marking and color hoops on baskets. Displays lithographed by Einson-Freeman Co., Inc.

columns of space or acres of posters to promote the use of a product that the buyer cannot recognize or identify.

The Florida Citrus Commission, with public funds to promote the use of oranges, found itself with a great stock of attractive and useful folders. The problem was to be sure that these would actually go through to the housewife. Came an opportunity to put these in the little orange cartons packed by the Waverly Cooperative, and the problem was solved.

After all, packaging that carries the goods only to the retailer does only part of the job. It stops at a way-station. Trimming, sorting and handling are all involved in getting lettuce from crate to housewife, potatoes from barrel to consumer. To eliminate not only

the labor and the price of bags, but also the waste and danger of extra handling, are factors not to be forgotten in considering costs. Some will argue that the chain store manager and clerks can easily do this work in spare time without extra cost. Those who say this little realize the vast number of tasks that must be performed in odd moments by the staff of a retail store, and if they think there is much time going to waste, they are hardly aware of the efficiency-mindedness of the majority of chain store executives.

Years have been given to building up the sensibilities of consumers in respect to cleanliness and protection from disease-bearing germs. This is mostly well founded. Exposure to dust, to drying air, and to the touch of

many hands is increasingly repulsive to buyers. And here the little package shines.

Super-markets, with their miles of shelves and dozens of customer-powered "prams" moving about to collect next week's food supply, have now spread from great cities to towns and even to villages. Here, weighing and measuring and bagging are thoroughly out of tune with the adopted theme song of this smooth-flowing food-merchandising system.

The Little Tomato Box

The 1-lb. tomato carton has been under development for several years, early work having been done by Robert Gair Co., Inc., and the Atlantic Commission Co. That it has really gone over is evident by the presence of cartoned tomatoes in nearly all of the Washington Street jobbing houses in New York City, and in independent retail stores as well as chains. The little box is of light folding paperboard, 10 in. long, $2\frac{3}{4}$ in. wide and $2\frac{1}{4}$ in. to $2\frac{1}{2}$ in. deep, holding four or five tomatoes in a single row. A window of cellulose film affords good display, with the ruby red of the fruits in gleaming contrast to the green of the paperboard. Bits of shredded paper are usually packed with the tomatoes for cushioning and decoration. The whole job can be carried through at less than one cent per pound over the cost of packing in 10-lb. cartons. The idea made little headway until costs were brought to this low level.

The hothouse growers have not yet adopted the pound box. One reason given by the manager of a large central packing plant is the great variability in size of the fruits. Solution of this problem is apparently a job for the plant breeder.

This matter of uniformity of size is of major importance in its relation to the packaging of many agricultural products. Packers of southern tomatoes are able to

buy lug boxes, packed to definite count although there is still some variation within the package.

Apples

Gilbert O'Brien, of Worcester, Mass., and New York, has been the promoter of a 2-lb. corrugated board carton for apples that is now in the big figure class. It carries a single layer of apples, five to nine in number, to make 2 lbs. It is packed up-side-down and the inset bottom is stitched into place. This inset arrangement allows some flexibility as to depth and protects against bruising. The front has a sizable opening, only partly cut, but easily removable for display. Also, scores or creases extend from corners to the window allowing for some variability in size of fruits.

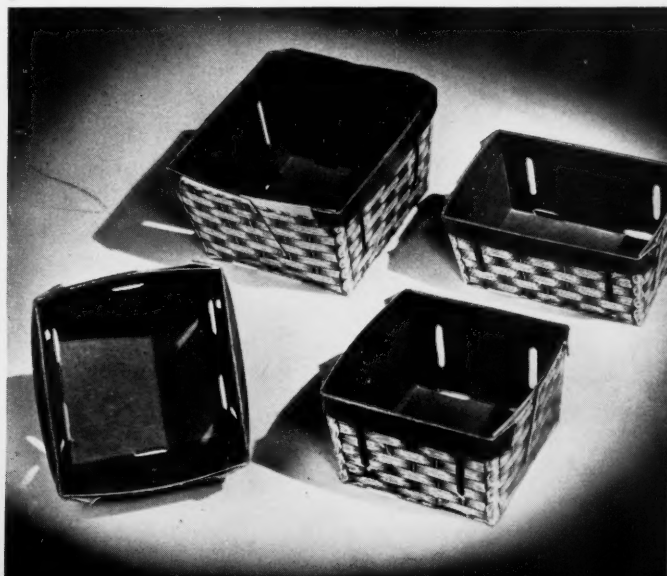
This attractive and convenient pack retailed in 1937 for 15 cents, and in 1938 for 12 cents. Volume sales increased with each cent of price reduction below 15 cents.

Florida Oranges

The citrus field has now been invaded by the consumer package and with marked success. The Waverly Orange Growers Cooperative of Waverly, Fla.—a strong and seasoned growers organization—has taken up the method. The box is of the same design as the one described for apples. Both are made under the Nu-Bak patents. It is $9\frac{1}{4}$ in. by 6 in. by $2\frac{7}{8}$ in. outside. The bottom inset is about $\frac{1}{2}$ in. but its placing may be varied slightly according to the size of the fruit. The box carries 8 oranges of 126 size; that is, 126 oranges to the standard $1\frac{3}{5}$ bushel box. Other common sizes are 156, 176 and 200. Perhaps the most common is 176. It is said that 8 oranges of 126 size will outweigh and outjuice 12 of 176 size. The new package was shipped by truck to Jacksonville and then to New York by boat. It was sold in the Daniel Reeves chain at 21 (Continued on page 96)

7. A sturdy corrugated fruit shipper sealed for transport by use of two short stays inserted through ventilating holes in the top of the container. Designed and manufactured by The Ashtabula Corrugated Box Co. 8. Although paperboard is the medium here used, Bloomer Bros. Co. decorates its fruit and vegetable baskets with a basket weave imprint to provide attractive appearance to contrast pleasantly with the dark inner surface of the board. Transparent protective overwraps complete the package.

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The Commercial Significance of Light on Glass Packed Foods

By WM. B. ESSELEN, Jr. and H. A. BARNBY*

*This article is based upon a report presented by H. A. Barnby, director of the Packaging Research Division of the Owens-Illinois Glass Co., at the recent Food Technology Conference sponsored by the Massachusetts Institute of Technology. Messrs. Barnby's and Esselen's research represents, we believe, one of the first attempts to approach this problem from the viewpoint of commercial practices rather than that of the laboratory. Modern Packaging will welcome comments on this article and discussions of other work which may be underway along these lines.

In 1937, roughly $7\frac{1}{2}$ billion glass containers went to market in this country. At the rate a watch ticks, it would take 95 years continuous running to produce one tick for each of these containers. This figure is more or less typical of the glass container production that has been turned out annually in late years.

Consider for the moment the endless array of items marketed in glass, the widespread distribution of same as to climate, storage conditions, etc. Is this not in reality a gigantic packaging experiment participated in by thousands of manufacturers, each with his own special products? What an experiment! Also what an opportunity for those devastating rays of the sun to get in their handiwork, resulting in deteriorated or returned merchandise.

Bear in mind that this "experiment" referred to is a commercial one. It deals solely with the facts as we learn of them from the factory, the market and the kitchen.

And what do the results show? Merely that the number of instances where sunlight has been found responsible for a commercially significant loss of quality in properly packed foods in glass is rare indeed. As will be seen later, it is not at all uncommon for changes resulting solely from heat and oxygen to be interpreted as a light effect.

It was the almost utter conflict of these commercial observations just noted, with the periodic reports of laboratory investigators on light effects, which largely prompted this investigation. In the discussion hereinafter will be presented evidence, which, we believe, explains why commercial results have so seldom tallied with light exposure tests conducted under laboratory test conditions.

How Much Are Commercial Foods Exposed to Light?

Suppose we follow a glass packed food product through its several stages from production to the consumer.

* Respectively Staff Member and Director, Packaging Research Division, Owens-Illinois Glass Co.

The first thing we note is that there are various agencies which protect this container from light influence:

1. Carton Protection—To insure against breakage in shipment, a glued light-proof corrugated carton surrounds all glass packed products from the moment they are packed until they are displayed for sale. In other words, the product is protected from sunlight until it goes on the retail shelf.

2. Label and Shelf Protection—On the shelf or in mass display, the front surface of the jar not covered by label is the only portion exposed to light influence. The top, bottom, sides and rear faces are shielded.

3. Opacity of Product—Most foods are of such color or solids content as to be practically opaque to the transmission of light of the wave lengths not previously screened out.

4. Sunlight Intensity Compared Indoors and Outdoors—It is self-evident that goods on store shelves are exposed to a much lower intensity of light than if placed outside the store window.

The most surprising and, we believe, enlightening evidence as to why commercially marketed food products do not become "light struck" came as the result of actually measuring this difference in light intensity outside and inside of retail stores with an accurately calibrated G. E. light meter which contained no filter.

These readings were taken in a number of Toledo stores with unobstructed south exposure at noon on clear days between June 16 and 20, 1939. Thus the values recorded represent the most severe sunlight exposure conditions obtainable. Foot candle readings were made both inside and outside with the meter pointing directly south. The results of this check-up are shown in chart A which shows that the contents of a jar located on the store shelf with *brightest sun exposure* received only .005 of the light effect it would have received if similarly exposed outside the store. This outside reading, however, was actually over 400 times

the average reading taken on typical store shelves of normal light intensity.

We feel that these figures provide the long needed information for reconciling the results of laboratory findings with those of commercial experience.

How Long Are Foods on Retail Shelves?

For light to affect a food while on the retail shelf there must not only be ample intensity of light reaching the package, but also sufficient length of exposure time.

Here again, we were short of facts, so did a little investigating of the comparative length of time retailers hold merchandise on their shelves now as compared with ten or more years ago. While exact figures are lacking on the latter, we do find that there has been a marked speeding up during the past decade in the turnover of all merchandise. With the grocer, it has been a matter of sheer economics where the narrow profit margin demands six to ten turns of capital a year to produce a profit. We found many stores regularly purchase part cases of slow moving items to keep down their inventory. They report that they must either move the line they handle or handle only those lines that move. One store chain plans on emptying their shelves every two weeks. If independent merchants are only one-third as successful in turning their stock, that would only make a six week average shelf life in their case.

Judging from the light meter results obtained, six weeks inside storage on a typical store shelf would not constitute excessive exposure for a food product.

Other Factors Than Light Must Be Considered

If it is true that light plays only a minor role in bringing about quality changes noted in certain food products during storage, to what then can these product changes be attributed?

If we look over the records of commercial packs where an examination has been made to run down the cause of the declining quality, we find in better than nine cases out of ten that the damage was done before the packages were removed from the shipping case. We

find almost invariably also that the quality change has resulted from oxidation aided by whatever heat accompanied the storage conditions.

After making a thorough survey of the technical literature, we find example after example where separate investigators have confirmed our commercial evidence that most of the objectionable changes in packaged foods are due primarily to oxidation and heat and will take place regardless of the presence or absence of light.

The many references in the literature uncovered show that oxygen is the Number 1 factor with heat as a close second in bringing about the color and flavor changes in foods normally encountered.

The literature also reveals many experiments in which the action of light on foods has been studied and the interpretations made without differentiating between the heat-plus-oxygen effect and any influence observed was attributed to light alone. In those cases where all three of these factors have been controlled and studied, it has been found that in the absence of oxygen, little or no deterioration takes place. This is particularly true at normal storage temperatures. Let us look at a few cases, in point, by way of illustration.

Quality Changes in Bottle Juices

We all know that fruit juices and the like are among the foods most apt to show quality deterioration during storage. When we sum up the results of various investigators on representative juices, here is what we find:

1. **Tomato Juice**—A composite of what is reported in the technical literature shows that we know very little concerning the exact nature of changes taking place in packaged tomato juice. Cruess and Aref (3) have concluded that much of the undesirable change in flavor in canned tomato juice is oxidative. Matlack and Sando (14) suggest that these deleterious changes are due to chemical reactions taking place between various constituents of the tomato itself, and that in some cases these (Continued on page 100)

(3) See bibliography, page 102.

LIGHT INTENSITY OF TYPICAL RETAIL STORE LOCATIONS

METER LOCATION	LIGHT INTENSITY	RATIO OF OUTSIDE RDG. TO INSIDE RDG.
Outside Store Windows	6500 Foot Candles	—
Shelves—Front of Store	30-15 " "	433-216
" Middle of Store	15-5 " "	1300-433
" Shaded Parts of Store	5-1 " "	6500-1300



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1. This group of packages in the Johnson family carries the one-color silhouette Simple Simon trade mark, the color pattern being blue-green and orange-red trim against a white background. 2. Scores of novel figures and scenes form an all-over pattern on the paper bags and on the borders of the doilies. Even straw containers and the wooden spoons are imprinted with Johnson characteristic color schemes and designs. 3. Foil wraps and box coverings are employed in this family group. The distinctive style of lettering is decorative as well as legible. The foil wraps on the peppermint confections and the marshmallow and coconut bars utilize a conventionalized rendering of the Johnson type of building as part of its design theme.

PIEMAN'S PROGRESS

Howard Johnson started with a unique roadside restaurant idea and now they find themselves immersed, among other things, in packaging problems

A few years ago, New Englanders began to notice an increasing number of roadside stands of a character totally different from the types they had previously patronized. No planless shacks were these. Nor were they, in the California tradition, designed to imitate anything from a brown derby to a pink elephant—anything that is except a roadside restaurant. The Howard Johnson chain utilized the New England tradition of attractive shiplap architecture, white painted side walls and bright red roofs, off against a tastefully landscaped background. The restaurants were, for the most part, located with ample setback from the road, with neatly graveled parking lots and with an absence of the hundreds of totally unrelated signboards which have made the American roadside a stock symbol for ugliness.

To a large extent, the unique design of the buildings and their startling attractiveness served as sufficient identification for those who had become acquainted with them. It was possible, therefore, to reduce all signboards to a neatly arranged pylon board at the roadside point directly opposite each restaurant. These boards became, in fact, virtual trade marks for the operators of the Howard Johnson restaurants.

With the growth of the chain, it was but natural that attempts should be made to distribute items which could be taken out of the shops in addition to the food items sold on the premises and it was felt particularly desirable to afford extremely careful planning to these varied items, and particularly to their packages, in view of the fact that each would be, in effect, a missionary salesman for the entire Howard Johnson chain.

Today there is distributed through these constantly expanding roadside restaurant and ice cream shops, a line of candies, pastries and foods with numerous items in each category. The problem of design consisted of coordinating these heterogeneous items into one harmonious family. Competing lines of products did not enter into the problem, inasmuch as only Howard Johnson's products are sold in their roadside stands. Sound reasoning was used in achieving the maximum effectiveness and economy in this design problem.

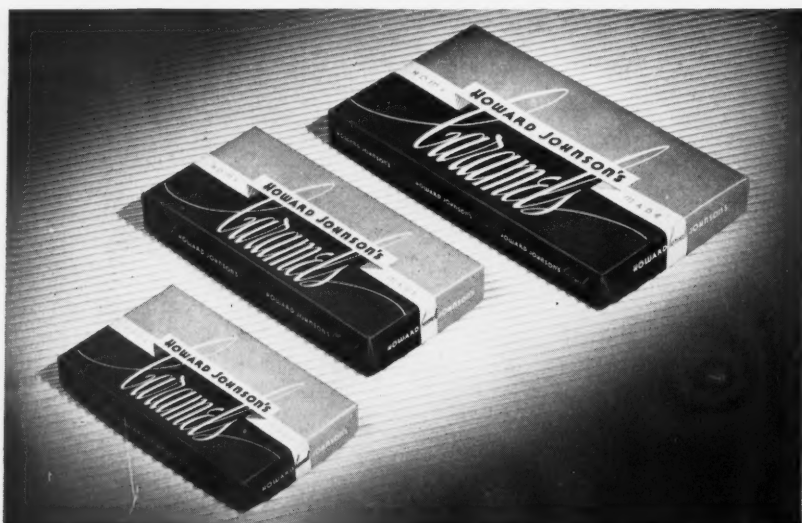
In the early days of the business, a trade mark of Simple Simon and the pieman had been adopted. This trade mark was a full color realistic representation of these well-known characters. Obviously, in packaging such an extensive and varied line, it would be both mechani-

3





4. The colorful lollipops, seen under their transparent cellulose overwrap, form the major design pattern. The Johnson trade mark appears, however, on the band along with the company name and product price. Transparent cellulose bags are likewise imprinted with the Simple Simon silhouette. 5. The containers for Johnson's caramels depart from the characteristic Johnson color scheme, an orange and brown combination being utilized.



cally impractical and tremendously more expensive to reproduce this trade mark in full color. To overcome this difficulty, a unique plan was decided upon.

To service the chain of restaurants over such a vast territory requires a large fleet of trucks. These trucks had been designed by Alcott, Thoner and Marsh. A color scheme in harmony with the whole plan was used and one which would insure a minimum of upkeep from road dirt, etc. Incorporated in the design of the trucks are painted panels with realistic full color representations of the Simple Simon trade mark. With the thought in mind that a cross section of the mass of adults and children that these roadside restaurants serve prefer realism to over-simplified modernism in their illustrations, these panels were designed to be explanatory and a transition to the silhouette one-color Simple Simon trade mark was used only in the design of the packages. The silhouette, as mentioned before, was adopted for not only mechanical and economical reasons, but also for its greater forcefulness and as a decorative spot.

In designing the packages, a distinctive style of lettering was used, decorative in quality, with a fair degree of legibility, inasmuch as competitive products were not a factor to be considered.

The architecture of the stands is Colonial in character, the color of the buildings white, roof orange-vermillion and trimmings blue-green. These colors were chosen after considerable research as standard colors for the package design, the principal function being identification. They are bright stimulating colors tying-in directly with those of the stand. The background color is creamy white and the whole color scheme is in keeping with the food and dairy products nature of the company's business, stimulating to the appetite and, at the same time, emanating a feeling of cheerfulness and holiday spirit.

The packages were designed for maximum display effects. In some instances, the package has been designed with the Simple Simon trade mark on one side and a conventionalized design of a stand (*Continued on page 102*)

Tradition

Burt looks back proudly to over half a century of boxmaking.

Burt is proud of its rank as first among box-makers . . . proud of its signal record of thousands of successful packages.

Burt looks back fondly . . . **AND WITH EQUAL FERVOR TO THE FUTURE!** For Burt is—has always been—a forward-looking organization. Burt is proud of its personnel . . . of its advanced methods of production . . . of its many contributions to package progress.

And proudest that there is none finer than the **BURT BOX OR CARTON!**

F. N. Burt Company, Inc.

500-540 SENECA STREET, BUFFALO, N. Y.

NEW YORK CITY
630 Fifth Avenue
Room 1461

PHILADELPHIA
A. B. Hebel
P. O. Box 6308
W. Market St. Sta.

NEW ENGLAND
A. B. Bacon
BOSTON
120 Baylston St.

SPRINGFIELD
P. O. Box 214
Highland Station

CHICAGO
Room 2203
919 N. Michigan Ave.

CLEVELAND
W. G. Hazen
P. O. Box 2445
E. Cleveland, Ohio

CINCINNATI
221 Walnut Street
Telephone MAin 0367

MEMPHIS
Frank D. Jackson
2150 Washington Ave.

MINNEAPOLIS
J. E. Moor
3329 Dupont Ave. South

LOS ANGELES
Louis Andrews
623 - South Grand Ave.

CANADIAN DIVISION
Dominion Paper Box Co., Ltd.
469-481 King Street West
Toronto 2, Canada

SHIPPING BOX CHECK CHART

Newly devised analysis system suggested as preliminary to intensive package revision study

In conference. Around the table are company executives, each man an expert in his own field. After arguments pro and con, this question is heard: "But what's wrong with our present shipping box? Sure, you talk about a new package, what it will look like, how it will increase sales. But what's wrong with the box we're using right now?"

"Well—"

And right there many a constructive selling job bogs down completely. Many, many companies do need new shipping boxes—there's hardly room for argument on that score. And in a large number of these companies there must be men who see the need for better packaging. But, as in most conferences, someone will raise the question, "What's wrong with our present package?" And that's a hard question to answer.

To help answer this question, one container producer has devised the "Shipping Box Check Chart," which subjects the "present" shipping box to cold, critical analysis. A Check Chart rating does not always find

something *wrong* with the package under examination. Some ratings have been surprisingly high—a few almost reaching the 100 per cent class. But if there are definite faults and failings in the shipping box, the chart will find them and put them down in black and white where they can be examined and discussed.

Ten basic elements are considered and judged in a Check Chart rating. They are information, fitness, design, simplicity, impression, attention, color, display, merchandising, engineering. Naturally, not all elements are present in every box. Some products, for instance, obviously do not lend themselves well to "display." In such cases, the package would be rated on the remaining nine elements, with "display" eliminated completely. Nor are the ten elements advanced as a rigid framework for shipping box criticism. Doubtless you would change or add to the list. But, in long experience, these ten are reported to have proven their ability to give a clear, comprehensive picture of the efficiency of almost any shipping box. (Continued on page 102)

The Check Chart blank developed is simple in the extreme yet brings out all relevant criticisms of current packages.

NUMBER	FEATURES	RATING										★ SEE BELOW	REMARKS
		10	20	30	40	50	60	70	80	90	100		
1	INFORMATION												
2	FITNESS												
3	DESIGN												
4	SIMPLICITY												
5	IMPRESSION												
6	ATTENTION												
7	COLOR												
8	DISPLAY												
9	MERCHANDISING												
10	ENGINEERING												
★Type of product and nature of distribution do not permit a rating on this feature COMPANY _____ ADDRESS _____ DATE _____ RATING _____ NO. _____												OUR RECOMMENDATIONS _____ ART DIRECTOR	

*An aid to package beauty
and a stimulus to sales...*



COLORFUL, SURE-SEALING METAL CAPS

ADD a style-note to your package . . . make a stronger bid for sales. Seal it with a stylish, handsomely lithographed Armstrong's Metal Cap.

These attractive closures come in a wide range of designs and colors. They may be lithographed with your trade-mark in bright color combinations to harmonize with other units of your package. In addition, they

seal tightly—give your product maximum protection against leakage or evaporation. And they are easy to remove and replace.

Style up your line with Armstrong's Metal Caps and make your package invite sales on the dealer's shelf or counter. For full details, write Armstrong Cork Company, Glass and Closure Division, 916 Arch St., Lancaster, Pa.



• *Armstrong's* METAL CAPS •



THE WORLD HAS A NEW WAY OF

There was a time when the public demanded only a good product.

But today's world, intent on better living, looks for more . . . expects not only a good product but a good package, too.

Buyers demand a package convenient to use and attractive to look at. A package that tells more about the contents.

No other package so fully meets those demands as

a modern glass container. To help you choose exactly the right glass container, we offer unequalled research facilities and broad experience with packaging and marketing problems in every field.

Whether you are launching a new product or re-packaging an old one, it will pay you to talk to an Owens-Illinois salesman. He offers a complete packaging service geared to the demands of today's world. Owens-Illinois Glass Company, Toledo.

OWENS ILLINOIS
 GLASS COMPANY
First in Glass

OF LOOKING AT THINGS



Owens-Illinois glass containers give good products more package-appeal — gleaming beauty, convenient utility, an air of quality. Food products look their best in the O-I Oval, decorated but lightweight. The Libbey Safedge Tumbler, decorated to mark baseball's centennial, is a premium container that speeds sales. A wide variety of dry products can be smartly packed in the new Utilijar, sturdy and lightweight, with large label space.





The vacuum capped milk bottle, of a type similar to those utilized for beer, grape juice, etc., is convenient in crowded refrigerators. When diluted according to directions, its pint contents are claimed to form a quart and a half of milk of quality equal to the standard grades available in conventional bottles.

VACUUM SEALED MILK BOTTLE

Non-returnable container is used for "Lactella," processed by new method

The sale of specially processed milk and cream, from food stores, in non-returnable bottles, has been authorized by the State of Wisconsin, Department of Agriculture and Markets, and distribution is now starting in the Waukesha area. The product, claimed to be sterilized and processed in accordance with patents held by George Grindrod of Waukesha, utilizes a non-returnable, pint size bottle, with a vapor sealed closure.

It is claimed for the product and its processing that the cream is so sterilized as to permit the retention of the container on food dealers' shelves, or in refrigerators, for at least a month. The Grindrod sterilization process is carried out by means of automatic continuous flow apparatus especially designed for the service intended. The preparation of the milk and cream for bottling involves steps of aseptic filling and sealing. Various equipment used in the filling and sealing steps is specially designed for the purpose and varies considerably from the equipment heretofore commonly used.

The new product, as marketed by the Niana Pure Food Co., is sold in pint bottles, in three grades. At 15¢ a pint, a grade is available which may be diluted to provide 1½ qts. of milk claimed to have a butter fat

content of two tenths of one per cent higher than the grades of milk marketed in the same area in regular containers. At 21¢ a pint, a heavier cream concentration, 18 per cent, is available for use in coffee, etc. At 33¢ a pint, a 30 per cent cream is sold for use in whipping.

A vacuum vapor seal, applied in an atmosphere of steam, is used as the closure on the present container. It is reported, however, that ordinary milk bottle closures, if used under aseptic conditions and completely sterilized, might be used where immediate consumption (within two weeks of packing) is anticipated.

Tin cans are not yet in use for milk processed in the manner described above, but experimental work is reported to indicate that they may be expected to be available shortly for commercial purposes. Two types of cans have been tried thus far—one is a standard sanitary can with a special lining and a special sealing compound; the other is a new type utilizing a vapor seal.

An interesting sidelight on the process is a report that a cream head does not rise to the top of the bottle, as is the case with ordinary certified or pasteurized milk.

Credit: Containers by Owens-Illinois Glass Co. Closures by White Cap Co.

BEAUTY IS ONLY SKIN
DEEP BUT IT'S NICE....



Heekin Lithographed Colors on metal containers are only "skin deep", but they help sell merchandise. Heekin Cans lithographed with colors that are ground, mixed, and blended for your specific package . . . are famous for their lustrous finish. With Heekin the business of producing lithographed containers is an art . . . not merely a matter of production. Yet, they cost no more than ordinary lithography. THE HECKIN CAN CO., CINCINNATI, OHIO.

heekin cans
Lithographed
WITH HARMONIZED COLORS

ALL CARRY THE SAME POLISH

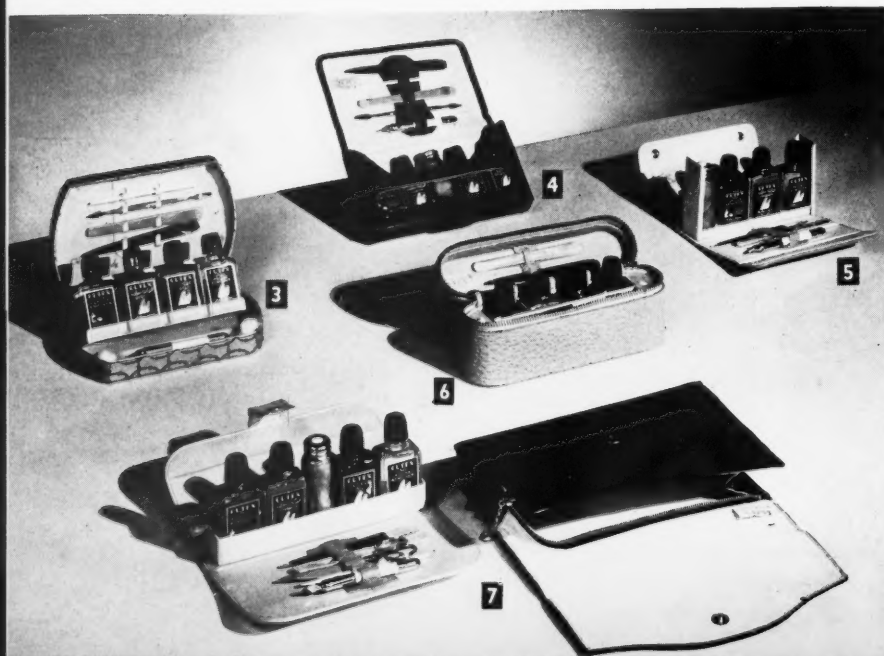
The Northam Warren Corp. has built a varied line of nail polish kits around a single basic product



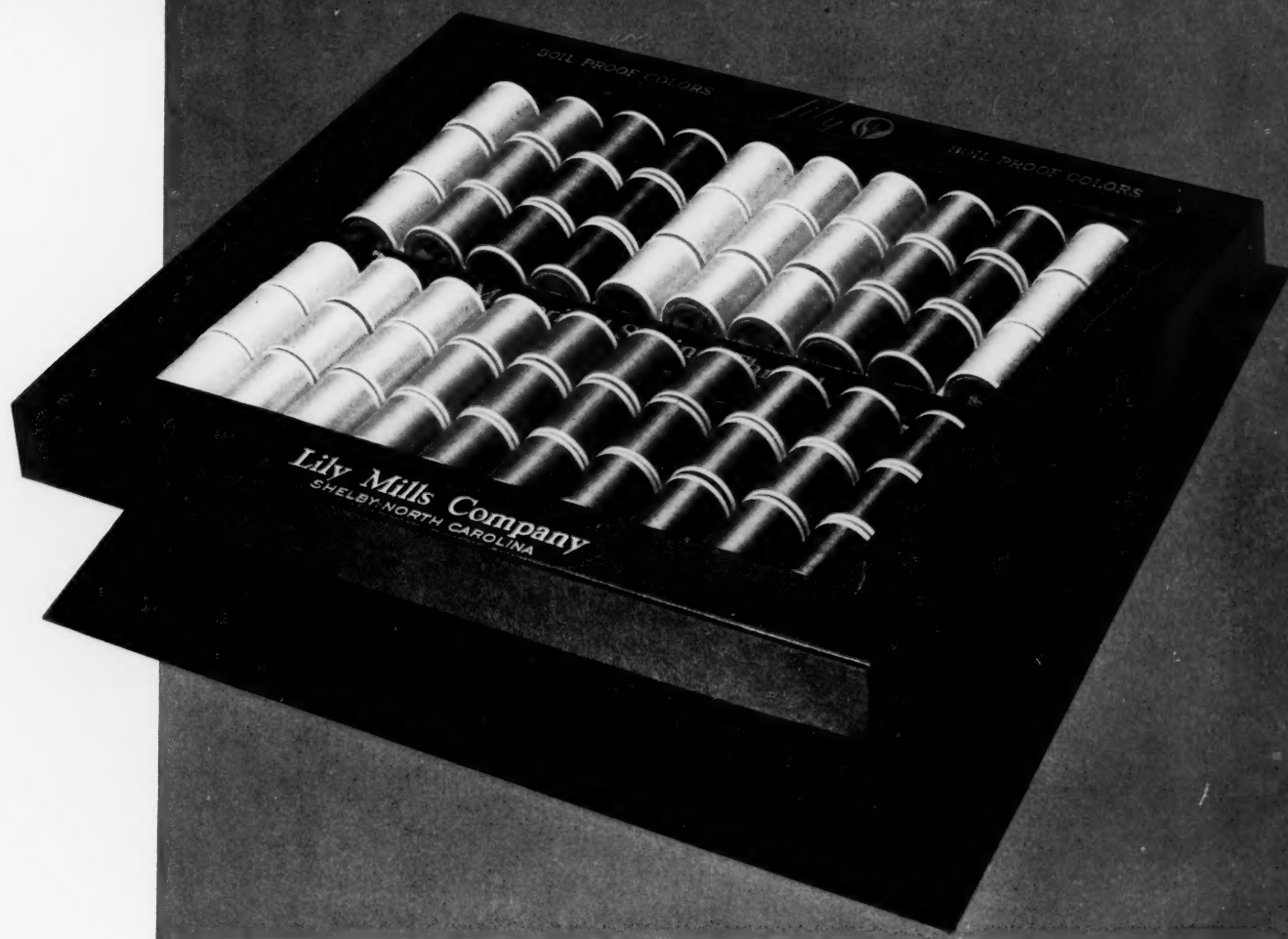
Utilizing special packaging materials as a means of dressing up standard merchandise for gift and holiday purposes is a practice well understood by many manufacturers today. Some firms realize that the gift package, as an expression of goodwill, should enhance the value of the product in order to make it an item worthy of esteem as well as make the item appear different from the everyday product.

The Northam Warren Corp. has this year devised gift packages which dress up the standard products of the company—Cutex nail polish, remover, oil and accessory manicure implements—in a manner calculated to appeal to a wide price market. Each of the nail polish ensembles, however, from the least expensive to the most luxurious, show an appreciation for the simple, functional design expression. They increase the value of the product as a gift item from a decorative as well as a utilitarian viewpoint. Interest in the ensembles as gifts may be aroused by different appeals—the feminine shopper would be interested by the ease with which she might use the various manicure articles directly from the package and the masculine shopper would be intrigued by the ingenuity or style of the packages.

The gift kits—in fine leathers, plastics or fabrics—all contain Cutex preparations and implements and are designed to either grace the dressing table or to be used for traveling purposes. Those sets planned for dressing table use are made of plastics—a durable material, easily kept clean. One case is streamlined in design and holds three Cutex preparations in firm upright position so that the products can be used with— (Continued on page 90)



1. The base of this plastic kit is so molded as to hold three bottles on a stepped-up platform as well as to provide troughs for cotton and implements. 2. The base of this plastic container likewise holds the manicure items in individual sections. Note the metal clip which holds cellophane-wrapped cotton in place. 3. The metal tray holding four bottles rises when the lid is raised and slides in a flat position when the lid is lowered. 4. The ingenious use of a transparent cellulose window permits a view of the bottle labels for quick identity of the products. 5. Here again consumer convenience is kept in mind by having the bottles upright and ready for use without having to remove them from the container. 6. A sturdy leather case with a zipped-on lid. 7. The tray containing all manicure essentials fits into the silk covered purse which, if desired, might be used as a handbag.



Protected Indefinitely ...yet Clearly Displayed

FOR MANY YEARS, colorful assortments of thread have been kept behind glass in counter cabinets. But glass is breakable, and comparatively expensive. So Lily Mills, looking for a container that would give lasting protection at a lower cost, chose a cardboard carton with a crystal-clear window of *Eastman Acetate Sheet*. The result—an attractive package that effectively shows the colors, yet completely protects the thread . . . and at moderate cost.

This practical and economical use of *Eastman Acetate Sheet* illustrates many of its advantages in modern packaging. It displays merchandise clearly, in natural color . . . will not crack or shatter . . . can be easily combined with other materials. It can be

molded, drawn, or folded, yet has ample strength to form a substantial container when used alone. It takes printing without wrinkling.

This versatile material—*Eastman Acetate Sheet*—is furnished in thicknesses of .003", .005", .0075", .010", .015", and .020"; in standard- and cut-to-size sheets, and in rolls of any convenient length and up to 40" in width. For generous working samples and technical information, write to Eastman Kodak Company, *Chemical Sales Division*, Rochester, N. Y.

• • •

Be sure to visit the Kodak Building at the New York World's Fair—One Hundred Years of Photography...Cavalcade of Color... Kodak in Medicine, Science, Education. Photographic experts to assist you. You'll find this a genuinely worth-while exhibit.

EASTMAN ACETATE SHEET *Appeals—Displays—Sells*



1

1. The 35 cent test kit consists of a small plastic jar, a flat powder drum and a transparent acetate cylinder that holds the packs together as a unit. 2. Face powder is packed in a table bowl with double shell metal cap. A beveled, acetate, two-piece container has re-use as a dressing table box. The puff rests on an acetate tray set into the neck of the jar.



2

NEW TRICKS WITH ACETATE

improve Caubaye toiletry packages appearance and simultaneously add consumer convenience features

In introducing its new products, the cosmetic firm of Caubaye, Inc., has ingeniously utilized acetate sheeting in three novel ways, each demonstrative of the possibilities inherent in rigid transparent materials.

For a powder jar, an attractive round, re-use box is formed of two die-pressed sections. One of these is cemented to a shallow transparent cylinder to form the box base. The other forms the slip-over top. The cylindrical section is printed—while in the flat—in a deep burgundy design with reverse lettering backed, in the assembled package, by the product itself as seen through the jar walls.

Within the jar, acetate has been called upon to provide a puff-tray, situated in the neck of the jar so that the

puff is always accessible. The tray also insures that the puff may be kept free from an over-load of powder. It is easily lifted to provide access to the main face powder reservoir.

For a combination offer of cold cream and face powder in small containers, an acetate cylinder with one end beaded is used to hold both containers, plus a circular, together as a unit. Both packages are, of course, of the same diameter.

Credits: Acetate trays and boxes by Universal Stamping Co. Powder jar, Hazel-Atlas Glass Co. Cream jar, Colt's Patent Fire Arms Mfg. Co. Powder box, E. N. Rowell Co., Inc.

LET THESE LILLIPUTIANS DO A **GIANT SALES JOB** FOR YOU

Paramount presents

"GULLIVER'S TRAVELS"

produced by **Max Fleischer**
directed by **Dave Fleischer**

Based on Jonathan Swift's famous story, and streamlined for the modern age, this full length technicolor cartoon masterpiece will have its world premiere about Christmas time. Promoted nationally by one of Paramount's largest advertising campaigns, the premium value of its characters will be exceptional.



RED
FIGURE

Now TWINKLETOES is such a
goof
He lacks co-ordination
In every action there is proof
He is an odd creation.



BLACK
FIGURE

"SNEAK" is the tallest of
the spies
And very double jointed
He seems to have a thousand
eyes
Whichever way he's
pointed.

"SNOOP" is a chesty sort
of guy
Mysterious in make-up
So nimble is this little spy
A leaflet would not shake-up.



MAHOGANY
FIGURE



BROWN
FIGURE

In Bifasco there lives a King
Whose tactics are quite
drastic
Tis BOMBO that they named
this King
Because he is bombastic.



BLACK
FIGURE

This LITTLE KING of Lilliput
When trouble came he'd
share it
He'd fight a war for Lilliput
But never would declare it.



Now GABBY he is very small
The smallest of his people
But in his mind he is as tall
As any giant stepple.

ORANGE FIGURE



Here's GULLIVER a mighty man
No dangers were too tragic
He sailed the seas without a plan
And found this isle of magic.

ORANGE FIGURE

HAZEL-ATLAS presents GULLIVER *Tumblers*

Ten tumblers, each picturing one of the great cartoon's delightful characters, with a charming descriptive verse. Each character in its own distinctive color. Stocked in many popular sizes and available in any size in reasonable quantities. Let these Lilliputians do a giant sales job for you. Write at once for complete descriptive folder.

BLUE
FIGURE



RED
FIGURE



PRINCE DAVID would be
gracious
He loves his subjects
And his subjects love him
He is a very good
man.



HAZEL-ATLAS GLASS COMPANY...WHEELING, W. VA.

Copyright 1939 by
Paramount Pictures, Inc.



The appetizing goodness of Sugs can be seen through the upper portion of the transparent cellulose bags. The lower portion is printed in color to indicate flavor of the sugar coating on the nut meats.

BAGS FORM DISPLAY PATTERN

Aiming to bite off a chunk of the five- and ten-cent candy business, Sugs, Inc., recently launched a new ten-cent confection, known as Sugs, an abbreviation of the word sugar. The newcomer to the candy field utilizes bags so designed as to form an integral part of a visual pattern when arranged in a display container.

Printed cellophane bags, holding 1½ oz. of the sugared nuts, are utilized for the merchandising of the product. The lower half of the bag is printed in color to indicate the various flavors—as orange for orange flavor, tan for maple and brown for cinnamon. The upper half of the bag bears the product name but wisely permits a view of the confection through the unprinted portion. Thus consumers are given an opportunity to see the new product and to be sold by its appetizing appearance.

Twenty-four of the 1½ oz. transparent cellulose bags fit neatly into a folding carton which has sufficient strength to serve as a shipping container when the lid is closed. The carton, upon reaching the retailer's hands, can be snapped open to throw a die-cut half circle into prominence. Tucking in of a flap forms a permanent sales display until the contents of the entire container are sold. The natural manilla colored container forms an excellent background for the printed, transparent bags.

Credit: Designed by Barnes & Reinecke. Bags by Thomas M. Royal & Co. Display-shipping box by Mott Carton & Paper Co.



A natural manilla colored container forms an excellent counter display for the merchandising of the product and likewise serves as a sturdy shipping container.

**Do your
packages
reflect
Ridgelo
CLAY COATED
LEADERSHIP?**



**IDEAS, RESEARCH, IMPROVEMENTS, STANDARDIZED QUALITY
... ALL COME UNDER RIDGELO CLAY COATED LEADERSHIP**

For example, Folding Cartons, turned out on modern machinery at high speed—printed, cut and glued—need a board to stand the gaff. Inks must run perfectly, register and die work must be correct.

RIDGELO SPECIAL COATED BOARDS ...

have kept pace with these developments and are supplied for many of the leading automatic-made boxes.

METALLIC COATED BOARDS ...

such as RIDGELO Gold and Silver, also have seen rapid progress. Smoother by far than ever before—richer—cleaner—brighter—they are favorably compared with much more expensive boards. If you would like to have samples to prove this point, we will send them gladly.

COATED TAG STOCK ...

has been a RIDGELO Leader for many years. These tags are attached to fabrics—materials of many kinds—so the coating must be safe. RIDGELO makes it insoluble and in colors fast-to-light. To give lustre and "snap" to these tiny printed pieces, a new RIDGELO coating forms the perfect base for gloss inks and varnishes—brilliance never before possible at such low cost.

We would enjoy your inquiries

MADE AT RIDGEFIELD, N. J. BY LOWE PAPER COMPANY

Representatives: E. C. Collins, Baltimore • Bradner Smith and Company and Mac Sim Bar Paper Company, Chicago
H. B. Royce, Detroit • Zellerbach Paper Company, Pacific Coast • A. E. Kellogg, St. Louis



Mirror of Beauty!

DIRECT COLOR

by

EINSON-FREEMAN

● No process of reproduction for window and store display has been so successful in capturing all the essential elements of beauty—

—velvet skin, glowing complexion, transparent white of teeth, vivid flash of lipstick or nail polish, silky strands of coiffure, or texture of fabric.

If you are seeking a true "mirror of beauty" for a product to promote or preserve it, ask an Einson-Freeman executive to show you the brilliant originals of the displays pictured here.

EINSON-FREEMAN CO. INC.
LITHOGRAPHERS • LONG ISLAND CITY, N. Y.



MODERN DISPLAY



WHAT THE DRUGGIST WANTS IN DISPLAY

A SURVEY BY THE INSTITUTE OF PACKAGE RESEARCH

No navigator would think of starting an ocean voyage without adequate navigation instruments and charts. Even a "wrong way Corrigan," flying the ocean in a crate, takes along, in addition to his sandwich and chocolate bar, a set of extremely accurate and extremely reliable navigating instruments.

No manufacturer who presumes to operate on any basis of scientific factory management would contemplate the production of a new item without exhaustive laboratory tests. Yet these very same manufacturers, with very few exceptions, follow display policies which carry them through completely uncharted seas.

When asked why they continue to work by rule of thumb, the more thoughtful among manufacturers quite logically raise the argument that the human element plays so important a part in the reactions to displays of various types and sizes that statistical determinations serve to obscure the facts rather than to provide any enlightenment.

This seemingly plausible explanation demands re-examination, however. It is true enough that broad general rules cannot be set up to predict the reactions of either storekeepers or store patrons to every variable in the display picture. A copy theme that may be completely acceptable in New England may be deemed immoral in Michigan; an illustration that may achieve high favor in California may prove a subject for derisive comment in Alabama; and a sales angle aptly phrased

for the climate of the Middle West may prove completely incapable of winning sales in the Rocky Mountain states.

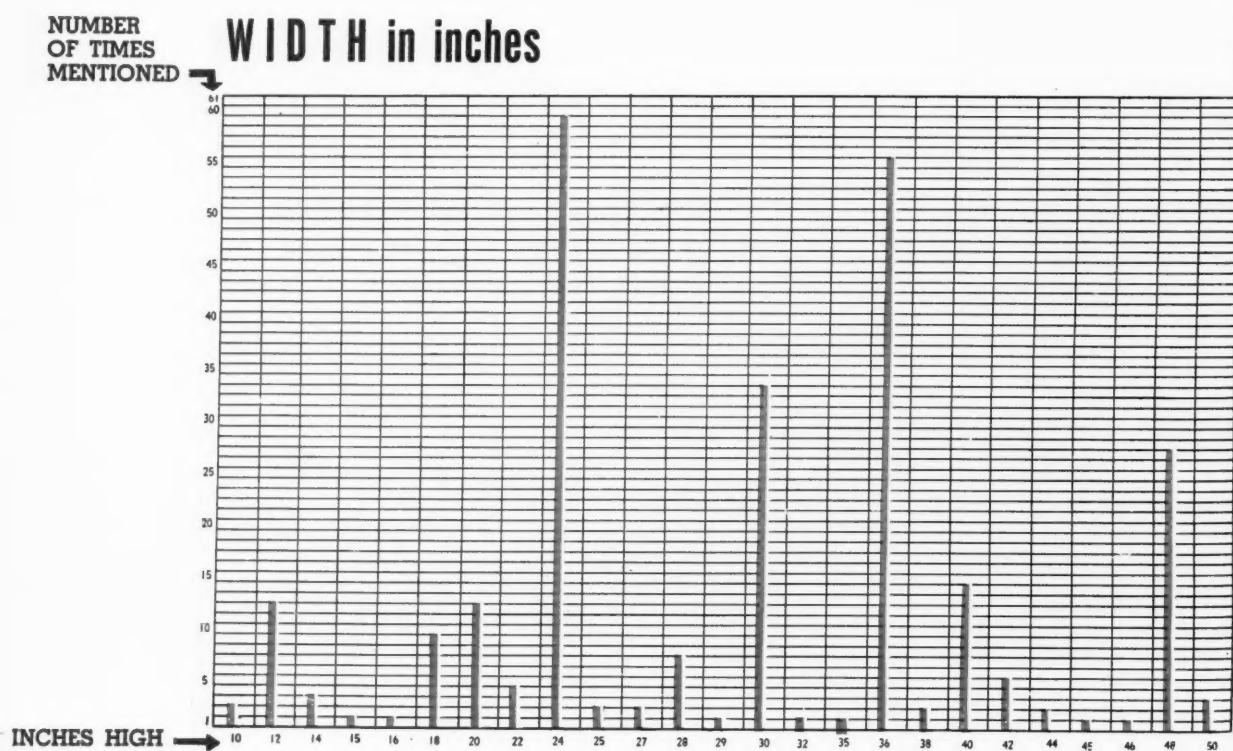
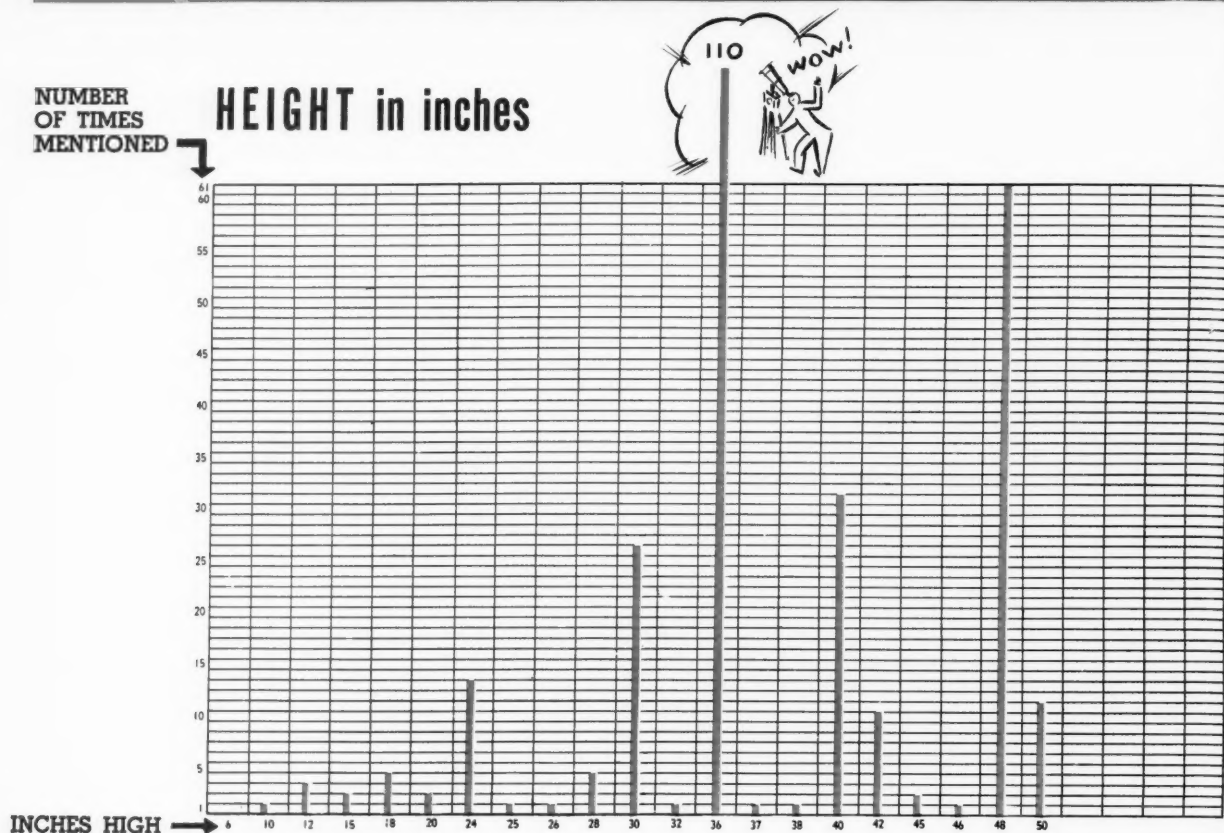
Granting all this, must we then abandon all attempts to apply the standards of scientific measurement to all the problems of display—construction, distribution and installation?

Obviously, no. There are many questions constantly arising whenever a new display or a new display program is to be considered—questions the answers to which are susceptible of analysis by statistical methods and scientific measurements. The Institute of Package Research, in the present survey, has not attempted to raise all of these questions, nor has it even attempted to find the ultimate answers to the few questions which it has raised. The primary purpose of this survey is to demonstrate the possibilities of applying analytical methods to

Window display receipts and usage as reported by druggists in 10 typical states.

Average number of "free" window displays received per store.....	3.923
Average number used per store.....	2.788
Percentage of displays used.....	71%

LIMITATIONS ON DISPLAY SIZES. The charts below indicate the maximum heights, widths and depths of window displays, beyond which they become unacceptable to druggists.



display design and construction and to general display program planning.

For this reason, this study has taken a limited though, we believe, ample segment of a single industry. The Institute has canvassed a carefully selected group of retail pharmacies located in ten widely distributed states, namely, Arkansas, Connecticut, Illinois, Kansas, Louisiana, Minnesota, North Carolina, Pennsylvania, Utah, Washington.

It is particularly interesting to note—if a momentary digression may be permitted—that an extremely high percentage of responses and an extremely intelligent and willing degree of cooperation was obtained from the druggists who were asked to participate in this survey. Of the total number of druggists queried by mail, over 15 per cent responded fully to the questionnaire and of those responding, over 40 per cent indicated their high degree of interest in the subject by going beyond the questionnaire itself to append supplementary opinions and observations.

What, then, do these druggists want? Have they some experiences or desires which can be classified or grouped? Does a common thread run through store after store located in widely differing parts or sections of the country?

Vast Majority of Units Used

The answers to the first two questions of the Institute's survey show conclusively that whatever else they may want, pharmacists do want displays. The old canard about the scores of hundreds of displays to be found in every pharmacist's cellar may be laid to rest for, the

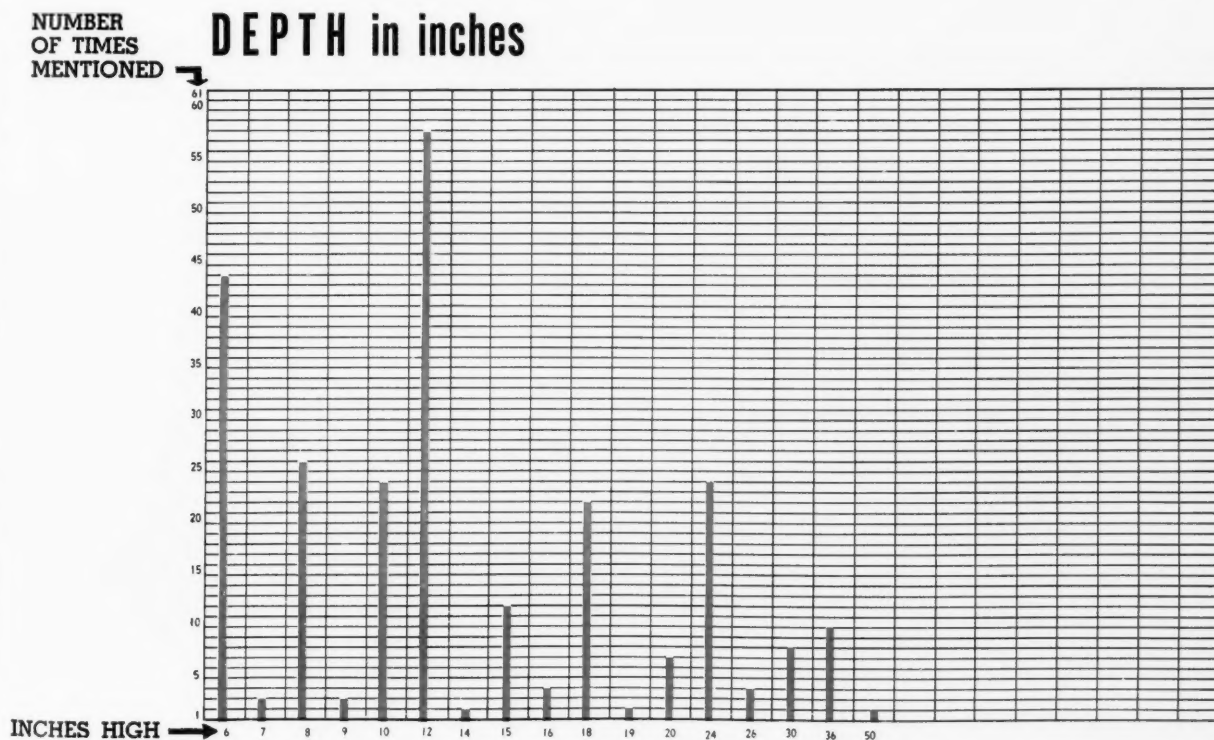
average pharmacist utilizes 71 per cent of all free window displays sent to him each month. This figure is derived in spite of the questionnaire designed to draw out the pharmacist's frankest criticisms.

The average number of free window displays received per store is slightly over 48 per year, or 3.923 per month. The average number used per store is slightly over 32 per year, or 2.788 per month. Seventy-one per cent of those received are reported as used. Twenty-nine per cent are discarded without a chance to influence the public in any manner.

You can, if you will, see the 29 per cent and forget the 71 per cent. But remember, for a moment, all the reasons why a druggist may discard displays and you will find that the figure of 71 per cent of acceptance and usage is rather higher than you would expect. Certainly it serves to indicate that the market for displays is by no means saturated.

You, however, as a manufacturer, or a display designer or planner, are not concerned with broad general percentages. The whole club's batting average is interesting, of course, but they pay off on the individual's batting average. You want to know how you can raise your percentage above the average, toward the 100 mark; how you can keep out of that 29 per cent zone of displays that never get a chance to do their work. Here, then, are a few don'ts—the most popular don'ts as listed by these druggists. (Remember, these are the druggists' don'ts, not ours.)

"Don't expect voluntary display space among 'Fair Trade' proponents if yours is not designated a 'Fair Trade' product."



"Don't expect space if your merchandise offers the pharmacist little or no profit margin."

"Don't expect space if the potential volume on your merchandise is low—the function of a window display is to bring people into the store, so even a high profit, low volume item cannot expect wide acceptance for its displays under ordinary circumstances."

"Don't expect to get space for seasonal products during their off seasons."

"Don't expect space for unattractive, overly commercialized units, particularly for higher priced merchandise, or in high income neighborhood stores."

"Don't expect space if your previous display, or your present one, is flimsy or poorly eased."

"Don't expect space for a display that cannot be juxtaposed with other displays or other merchandise in a large window."

Finally, "Don't expect preferred space for a display unaccompanied by dummy packages or similar accessory display units."

It will be noted that many of these complaints do not apply to certain groups of products or certain types of merchandise. Others apply all too well but, unfortunately, there is nothing that the display planner can do about it since the druggist is complaining about something inherent in the general policy of the company sponsoring the display. In other cases, complaints are made against displays for products which have fallen into dealer disfavor because of unfortunate price wars, low margins of profit, slow turnover, etc. These, of course, should not be strictly construed against displays as such, although they are, no doubt, to be considered in each individual case as factors for or against a decision as to whether or not to use displays at all.

General Rules Can Be Found

"But," you ask, "aren't there some things that are almost universal? Can't you give us some guiding rules that will let us eliminate one or more of the reasons why pharmacists object to our displays?"

There are such rules and one set of them has been most clearly demonstrated by the results charted on

pages 62 and 63. Here our hundreds of cooperating druggists have given us data as to the maximum sizes of acceptable window displays. In some cases, these maximums represent the maximum areas available. In other cases, they represent the restrictions imposed upon display sizes by the back panel entrances into windows, by window depth or due to the presence of permanent obstructions in the window construction or in the approaches to the window.

In still other cases—perhaps the majority of them—these reflect not physical limitations but mental limitations. The druggist has here told you the maximum areas he is willing to devote to any one display.

A closer examination of the table will disclose several interesting points. Consider, for instance, the table of display heights. A distinct pattern is here apparent, dominated by two peaks, with a 36 in. height receiving 110 votes and a 48 in. height receiving 61 votes. Two secondary groupings are found at the 30-in. and 40-in. levels and three other figures, 24 in., 42 in. and 50 in. show substantial returns.

This seemingly poses a very complicated problem for the display manager. Yet, on examination and analysis, the means of satisfying a majority of dealers will be readily found. The problem is one of striking a balance between size and circulation. A display only 12 in. high would theoretically achieve almost unanimous acceptance among dealers but, even if theory worked out in practice (which it doesn't), such a display would hardly do an effective selling job.

But, as between the choice of a 36-in. or a 48-in. display, we know from these figures that a 48-in. display would eliminate the vast majority of stores, whereas a 36-in. display would satisfy the vast majority. Those who think 48 in. a maximum height will accept a 36-in. display, along with our 110 dealers who will accept nothing larger than 36 in.

The Two-Size Solution

Another possibility suggests itself for those manufacturers who have a wide enough display distribution to justify the making of two (*Continued on page 70*)



Druggists Liked These Displays

Companies and displays mentioned as being "among the best of the year" by three or more of the druggists cooperating in this survey.

Abbott Laboratories.....	31	Mallinckrodt Chemical Works.....	4
Ethical.....	25	McKesson & Robbins, Inc.....	21
Vitamin.....	6	Calox Tooth Powder.....	5
Agfa Ansco Corp.....	10	DuBarry.....	1
Armand Co., The.....	8	Product not specified.....	15
Bauer & Black.....	9	Mennen Co., The.....	4
B & B First Aid.....	2	Mennen Baby Powder.....	4
Blue Jay.....	2	Mentholatum Co.....	14
Product not specified.....	5	Merck & Co., Inc.....	5
Bourjois, Inc.....	12	Miles Laboratories, Inc.....	63
Evening in Paris.....	11	Alka-Seltzer.....	63
Barbara Gould.....	1	Northam Warren Corp.....	3
Bristol-Myers Co.....	54	Cutex.....	2
Ipana.....	16	Peggy Sage.....	1
Sal Hepatica.....	5	Norwich Pharmacal Co., The.....	26
Vitalis.....	1	Unguentine.....	11
Product not specified.....	32	Pepto Bismol.....	2
Caldwell, Dr. W. B., Inc.....	9	Product not specified.....	13
Campana Sales Co.....	4	Nyal Co.....	4
Dreskin Coolies.....	1	Parke, Davis & Co.....	38
Italian Balm.....	3	Vitamin.....	4
Cenol Co.....	4	Product not specified.....	33
Chamberlain Laboratories, Inc.....	3	Pepsodent Co., The.....	15
Coca-Cola Co.....	7	Personal Products Corp., The.....	9
Colgate-Palmolive-Peet Co.....	96	Modess.....	9
Coty, Inc.....	43	Polk Miller Products Corp.....	8
Eastman Kodak Co.....	73	Sergeant's Dog Medicines.....	8
Emerson Drug Co.....	4	Pond's Extract Co.....	4
Bromo Seltzer.....	4	Pro-Phy-Lac-Tic Brush Co.....	4
Ex-Lax, Inc.....	6	Rubinstein, Helena, Inc.....	5
General Electric Co.....	4	Sales Builders, Inc.....	7
Mazda.....	3	Max Factor.....	7
Product not specified.....	1	Scholl Mfg. Co., Inc., The.....	6
Gillette Safety Razor Co.....	4	Sharp & Dohme.....	7
Griffin Mfg. Co., Inc.....	5	Sheaffer, W. A., Pen Co.....	8
Heinz, H. J., Co.....	4	Shulton, Inc.....	5
Baby Food.....	4	Early American line.....	5
Hudnut, Richard.....	5	Squibb, E. R., & Sons.....	26
Marvelous.....	1	Tampax, Inc.....	3
Richard Hudnut.....	4	United Drug Co.....	42
International Cellucotton Products Co.....	35	Bismorex.....	8
Kleenex.....	7	Cara Nome.....	3
Kotex.....	26	Joan Manning Chocolates.....	1
Product not specified.....	2	Neko.....	1
Johnson & Johnson.....	47	Rexall Baby Products.....	1
Tek Tooth Brush.....	2	Rexall Cod Liver Oil and Vitamin.....	6
Product not specified.....	45	Product not specified.....	22
Kemp Ice Cream Co.....	3	Upjohn Co., The.....	3
Lanteen Chemical Laboratories, Inc.....	6	Vitamin.....	3
Lentheric, Inc.....	11	Vick Chemical Co.....	7
Lever Brothers Co.....	11	Vinco Co.....	6
Lifebuoy.....	8	Walker Remedy Co.....	3
Product not specified.....	3	Walko.....	3
Lewis Howe Co.....	11	Weco Products Co.....	24
NR.....	2	Dr. West's Tooth Brush.....	24
Tums.....	9	Westclox Div. of General Time Instrument Corp.....	3
Liggett & Myers Tobacco Co.....	8	Stephen F. Whitman & Son, Inc.....	19
Chesterfield.....	8	Wright & Lawrence.....	3
Lucien Lelong, Inc.....	3	Yardley & Co., Ltd.....	22
Magazine Repeating Razor Co.....	7		
Schick Blade.....	3		
Schick Injector Razor.....	4		



Left: Twelve hats, each in its individual, windowed carton, are presented in this cleverly designed and constructed display container. Note the manner in which the light weight of the hat is indicated, via the printed scale and how the hat's crushability and moderate price are likewise graphically presented. Below: In closed position, the container forms a handy storage box for the dealer, keeping the hats dust-free and occupying but a small area of space.

WHIPPING UP HAT SALES

by means of a display unit which tells a quick story about the American Hat Co. Tahket Rite-Wate

It has been reported that more hats have been put on more men's heads this year than for some time past. This is ascribable to two points—high styling of men's hats and increased and better promotional ideas. Even in the straw hat field, the traditional shapes have been replaced, to a large extent, by so-called "high style" types and men have shown an increasing willingness to purchase feather weight soft felts. Thus when The American Hat Co. came out late this spring with a light weight crushable felt suitable for year 'round wear, it felt assured of a certain degree of acceptance.

That this acceptance, on the part of both dealers and consumers, has been far greater than originally anticipated is ascribed, by the company, in large measure, to a new merchandising display designed to present the outstanding features of the new hat in dramatic form.

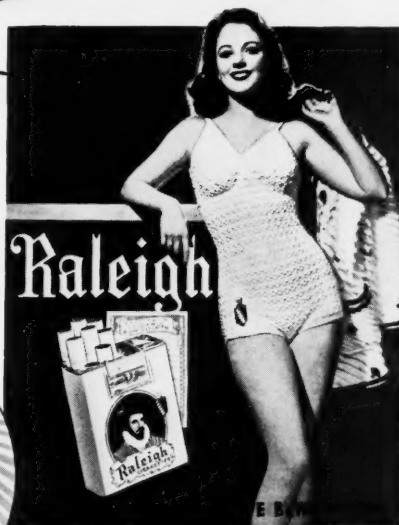
A semi-circular container, printed in a simulated tweed paper, with a hinged lid which locks in place by means of a glove-type button (Continued on page 92)



Eye Sure

GLAMOUR

DRAMA



Pulse-quickenin' charm
and eye appeal.

ZIP



Rip-roarin' sales punch
and power



Dramatization that shouts
"Quality at a price"

EXAMPLES of the creative ingenuity
available to you at FORBES—Teamed with
craftsmanship and knowledge of mar-
kets and buying habits—to provide just
the right approach at just the right time.

FORBES



LITHOGRAPH CO.

P. O. BOX 513 • BOSTON

NEW YORK

CHICAGO

CLEVELAND

ROCHESTER

DETROIT



1



2



3

1. San Felice cigars are being packed in a protective humi-jar and this container is, in turn, displayed out on the counter by means of an attractive display unit. The sales appeal of "a truly fresh cigar" is thereby capitalized upon. The display is die-cut and formed to fold flat in shipment and is easily erected, the jar itself holding it in upright position. The consumer is invited to help himself and price is prominently featured so that the sale can be consummated without trouble to the salesclerk. Created and lithographed by The Forbes Lithograph Co.

2. A direct color reproduction of a cover of the magazine "Mademoiselle" is utilized to illustrate the effects allegedly achieved through the use of Helena Rubinstein's new product, Photochrome make-up. Additional advantage achieved through the adoption of the magazine cover as display design is a tie-up between the product and one of the sponsoring company's advertising media. The unit is so constructed as to hold two actual containers of the product, thus fostering consumer examination of the new product. The uses to which Photochrome may be put are listed in legible print as part of the panel design. Produced by the Merit Display Card Co.

3. A sturdy cardboard panel, held upright by a prop in the rear, features eight actual samples of Eveready Pen-Light pocket flashlights within easy reach of shoppers. Inserted into individual slots, the items are held in place by clips which form a part of the spotlight casings. Display panel design features price in a bull's eye to catch attention and likewise carries reference to Eveready batteries utilized in the flashlights. Created in collaboration with the National Carbon Co. and produced by The Forbes Lithograph Co.

4. Direct color photography catches the soft glowing skin tones of the lovely model used for the central panel of the Contouré window display. Two small side pieces, flanking the framed Contouré model, utilize photography to present the sales packages of creams, lotions and cosmetics. The subordinate units might well be used as separate counter displays if desired. Manufactured by Einson-Freeman Co., Inc., and created by that company in collaboration with the L. C. Gumbinner Agency.

5. To encourage the sale of Dainty brand soup mix, this counter unit is utilized. Occupying only a small counter area, the display presents a good supply of actual sales packages. The unit folds flat for shipment and takes a three-dimensional effect when erected, with stepped-up platform holding six jars of the soup mix in die-cut sections. Two or three of the vacuum-packed tumblers may be set in the forefront of the display to invite consumers to handle and inspect the package. A small die-cut section holds informative folders. Back panel design is given over to an illustration of a bowl of soup, ready for serving, to show the appetizing goodness of the soup mix when it is properly prepared. The red rooster trade mark is likewise prominently featured along with the product price. Vacuum-sealed tumblers by the Anchor Hocking Glass Corp. Display produced by the Pinkerton Folding Box Co.

6. The New Departure Division of the General Motors Corp. is marketing a new type of bicycle brake which is said to give either high or low gear as desired. The device is shipped and displayed in a sturdy container which holds the various parts of the mechanism in a die-cut platform for safe shipment as well as for ready inspection by the shopper. The display panel design is dressed up with sketches of bicycles and their riders and price is boldly featured. Designed and manufactured by Robert Gair Co., Inc.

7. Plastics, glass, metal and fabric all go into the making of this attractive counter display for the presentation of Pall Mall cigarettes. The cast resin base and frame is fitted with a semi-circular glass pane through which the cigarette packages may be seen but not handled. A metal bar, surmounted by die-cut letters spelling "Pall Mall," is placed in front of the cigarette packages and a sales slogan, in metal,

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DISPLAY GALLERY

is an integral part of the plastic base. The velvet draped platform on which the packages rest within the glass window makes for a rich setting and completes a handsome and permanent display unit. Plastic portion of the display fabricated of Catalin by Joseph H. Meyer Bros.

8. A weebegone cartoon character, navigating on crutches and copiously wrapped in bandages makes his bow as the theme center of a new display container for the merchandising of bath mats. The terse copy under the illustration is planned to make consumers buy immediately so that they will not find themselves in the sorry condition of the cartoon character. Red and black printing on a white surface gives the novel cartoon message commanding display value. Simple directions are printed on the outside of the box, telling the dealer how the container can be transformed into a counter display. A perforated front panel is removed, the top panel is folded back and tucked in behind the merchandise to convert the shipping box into a display merchandiser. Designed and manufactured by The Hinde & Dauch Paper Co.



WHAT THE DRUGGIST WANTS IN DISPLAY

(Continued from page 64)

sizes of display. Here costs will not double by any means since the art work can be scaled up or down for use on either size. The advantage is obvious, for those who will accept and utilize a 48-in. display can do so and achieve for the cooperating manufacturer—in those stores at least—an extra 33 per cent of window domination. The rest, however, receive a size of unit they can well utilize.

The same type of grouping will be found in both the other charts relating to width and depth. The chart on display widths shows two peaks at the 24-in. and 36-in. levels, with two subordinate peaks at the 30-in. and 48-in. levels. A 24-in. width would satisfy the vast majority; a 36-in. width, as an alternative, would satisfy a very substantial portion.

In regard to display depths (from front to back of the window), a similar peak pattern is found, the largest grouping falling at the 12-in. level, with a second peak at the 6-in. level and with two or the four subordinate peaks immediately between, at the 8-in. and 10-in. levels.

Depths here need not be so readily adjusted on the two sizes idea, since displays can very easily be designed sufficiently shallow to permit the manufacturer the assurance of pleasing the majority of dealers in this respect at least. Certainly most displays fall within the 8-in. or 10-in. depth category and those which do not could very easily be modified in respect to easel construction, so as to comply.

Designers might well consider these figures as to depth, however, as a structural guide to display design which would indicate that many of the allotted spaces are far shallower than is ordinarily supposed and that displays should be so constructed, therefore, as to permit of their insertion in these shallow spaces with, perhaps, the possibility of their being re-arranged through move-

ment of wings, or otherwise to assume greater depth where the space available permits it.

Conclusions will be drawn from these charts only with the greatest of care and with the fact ever in mind that the charts represent the generalizations of dealers rather than their reactions in test cases. The fact that a dealer says that a display should not be over 48 in. in height does not mean that he will always refuse to utilize a display more than 4 ft. tall. It does, however, mean either that he cannot and, hence, will not use it, or that the display had better be a world beater to overcome its height obstacle.

Drawing our conclusions in the most conservative phrasing, we may fairly say that certain heights, widths and depths provide the maximum areas which may be expected to achieve maximum dealer acceptance and, hence, a maximum opportunity to reach the public eye. Somewhere in the range about 36 in. high, about 30 in. wide, and about 8 in. deep, you will find that display size which will have both the greatest power to get into the windows and the greatest chance to do an effective job once it has gotten in.

As a subordinate rule capable of somewhat modifying the situation in the manufacturer's favor, we have the following:

If the manufacturer can economically provide two or more sizes of display and can so place them that the larger size receives its fullest possible acceptance and the smaller size all the remaining possible acceptance, the total display area placed in store windows and ready to do a job on the consumer will be somewhat greater than that which can possibly be achieved by either the smaller or the larger size working alone or by any single intermediate size.

Lighted Units Are Wanted

A controversy has long raged as to whether lighted displays are worth the extra cost of their construction and installation. Here again the answer is up to the druggist and the druggist has provided an answer susceptible of varying interpretations, depending upon the products marketed, the display traditions of the field, the price margin, the cost of installation, the volume of display production, etc. Since interpretation under each possible combination of these conditions obviously cannot be undertaken in this report, such determination is left for the individual manufacturer. The facts upon which to base it, however, are amply illustrated in the charts on page 64. Eighty-four per cent of all druggists report their willingness to utilize lighted displays and almost one-half of those who do utilize lighted displays use them as night lights, leaving them on for part or all of the evening after their stores have closed.

It will thus be seen that lighted displays have a definite margin of acceptance in their favor as compared with the average reported acceptance of all displays submitted to dealers. More important, it will be seen that those which are installed have a varying but substantial margin of extra circulation, due to the fact that they are left on after stores close at night.



A similar controversy has also raged over the question of motion displays. These, tending to be more expensive than lighted displays and frequently incorporating light with motion, are less frequently offered to dealers than the lighted varieties. None the less, 65 per cent of all dealers report usage of motion displays, indicating in both these cases that displays incorporating light or motion, or both, enjoy a far longer life than ordinary still units. Whether such life is always desirable and whether it is always worth its extra cost, of course, depends upon the individual company set-up and the individual product marketed.

Dealer Votes Spell Circulation

The objection may be raised that while all the foregoing figures are very interesting they are also very abstract. If such objection has been valid up to this point, it most definitely is not valid in respect to the final question asked of dealers in regard to their window display uses. For in this last question dealers were asked to name the best displays used by them in the last year. Hence these answers are dealer acknowledgments of display effectiveness. The dealers here not merely signified their willingness to install a display of a given description but actually reported on its effectiveness with the public after it had already passed their own tests and had already earned their window space.

In the chart on page 65, these dealer votes are listed by companies, rather than by individual displays. In the case of companies manufacturing a number of products, the total is broken down and the figures for each of the products given separately as well.

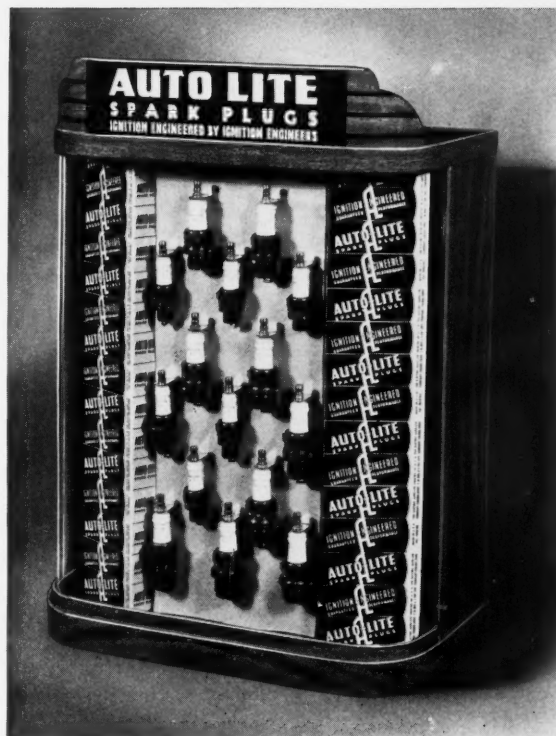
In addition to those displays listed here, scores of others received one or two dealer votes. Only those, however, which received three or more votes are listed, since this number among the dealers questioned was felt essential to eliminate chance factors.

It should be noted that a number of factors may have distorted the balance between these figures. Some displays which have received a high proportion of votes are those installed by companies supplying free installation services. Obviously, the free installation service may be a factor affecting any attempts to measure the dealer interest in the display itself. In other cases, the products represented are distributed only through certain dealer channels and, within these channels, substantially dominate store display policies. Where such is the case, once again a substantial distortion exists.

In spite of these recognized distortions and in spite of the relatively low proportion which the current sample represents in relation to the total number of druggists in the country, these figures should prove enlightening as a guide to the druggist's opinion as to which companies are doing a most effective job of retailer cooperation and point of sale advertising through the display medium.

* * *

This survey will be concluded in the October issue of Modern Packaging, at which time dealer size maximums respecting counter displays and floor stands will be discussed.



SALES *Building* DISPLAYS

This highly successful counter display is typical of ADVERTISING METAL DISPLAY CO.'s achievements for innumerable leading concerns.

Every item is out in front. And highly visible lettering of the product's name and slogan—is another sales-building feature of our metal displays.

Our Metal Signs also feature brilliant eye appeal in DuPont High Baked DuLux silk screen or color lithography. A thousand or a million signs are produced by us with equal perfection.

Write for illustrated booklet and full particulars.

ADVERTISING METAL DISPLAY CO.

Factory and General Offices: 125 N. Green St., Chicago
Eastern Division: 2 E. 23rd St., New York

Solving Problems built our Business

If you want to lower your packaging costs; if you want to improve your package without increasing costs; or if you have any other kind of packaging problem—don't be too quick to say: "It can't be done." *Solving packaging problems built our business.*

We have served the leading packaged goods concerns of this country since we were first established over 26 years ago. For the benefit of our customers, and the packaged goods industry in general, we have consistently pioneered in the development of faster, better, more economical machinery. Many of the outstanding packaging improvements made in the past 26 years were either conceived or culminated in our engineering department. From this pioneering policy, we have gained an extensive knowledge of packaging in all its phases. Well-known manufacturers, such as those whose products are shown here, don't hesitate to make use of this knowledge regularly. We might modestly say that solving our customers' problems helped build their business. We'd be glad to help you, without obligation of course.

Consult our nearest office. *Write for Literature.*

PACKAGE MACHINERY COMPANY, Springfield, Mass.

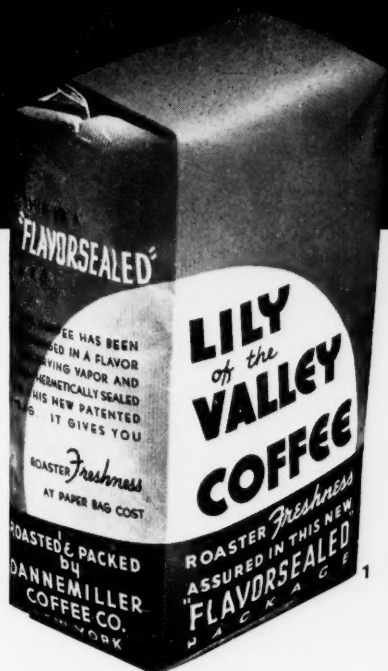
NEW YORK CHICAGO CLEVELAND LOS ANGELES
Mexico, D. F., Apartado 2303 Buenos Aires, Argentina: David H. Orton, Maipu, 231
Peterborough, England: Baker Perkins, Ltd. Melbourne, Australia: Baker Perkins, Pty., Ltd.



PACKAGE MACHINERY COMPANY

Over a Quarter Billion Packages per day are wrapped on our Machines

PACKAGING TECHNIQUE and PRODUCTION



1. From the outside, the new bag looks very similar to any other paper walled container.
2. The cut back construction of the bellows fold is here shown. This is designed to permit a tight seal along the entire top and bottom transverse lines of the Pliofilm lining.

2

FLAVOR RETAINING COFFEE BAG

Prevents air entry while permitting escape of gases which would otherwise "explode" its walls

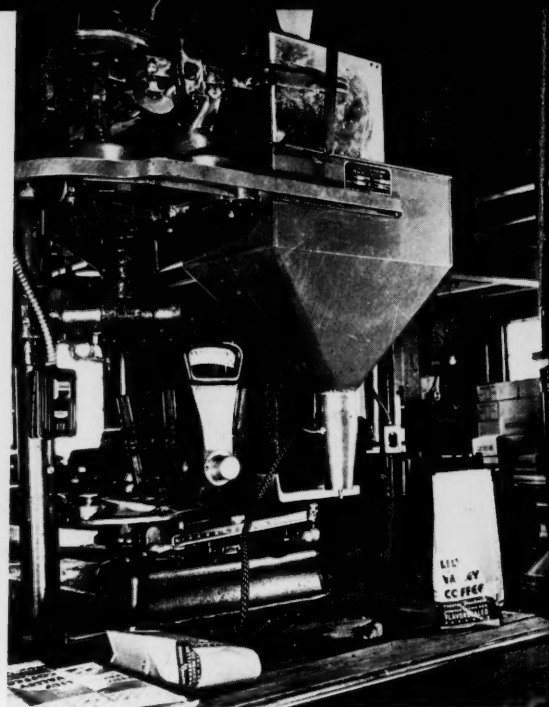
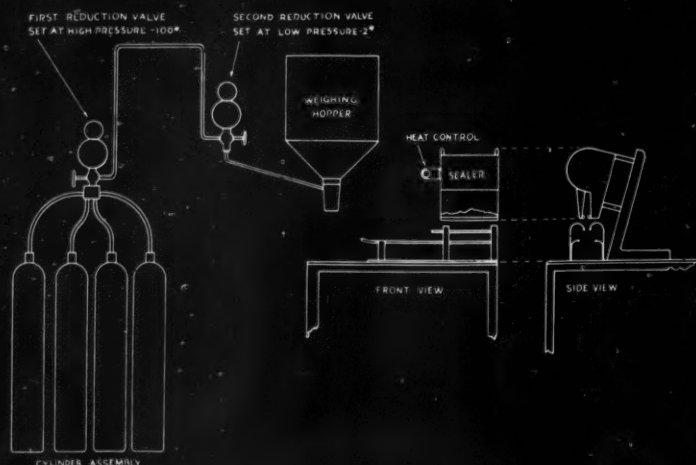
The day of the individual inventor who discovers a public need and creates the answer to that need while working by candlelight in his attic laboratory seems to be passed. Modern inventions are "compound" inventions—each researcher or group of researchers adding a bit more to the work that has gone before.

Such is the case with the new "Flav-O-Tainer" coffee bag, recently adopted by Brooklyn's Dannemiller Coffee Co., for the roots of this invention spread back through researches of the past decade in a number of directions. On the one hand, food technicians today have a better understanding of the nature of coffee and hence of the ways of preserving its aromatic qualities and its flavor from the time of roasting to the time of consumption in the home. On the other hand, package material producers have developed materials having heretofore unknown and unattainable qualities and packaging engineers have devised from these materials packages and a technique of packaging which utilizes the new knowledge of both coffee characteristics and material charac-

teristics in a most unique manner. This synthesis of earlier inventions has produced a whole potentially greater than the sum of its parts—an inexpensive, compact, easily filled and easily sealed package for which unusual coffee preserving claims are made.

The package has been devised by the research and technical staff of Thomas M. Royal & Co. and consists of a paper bag lined with Pliofilm—a cyclicized rubber resin made as a sheet material requiring no coatings on its exterior surface to provide moisture- and airtightness. The outer paper bag is designed to provide strength for the Pliofilm and to protect it against external injuries as well as to carry the printed package design. At the top and bottom of the container, where the transverse seals are made, the paper in the bellows fold has been cut back so as to provide at these points for proper sealing. This cutting back of the paper permits sealing of the transparent inner lining walls to each other at every point along the seam.

Among primary reasons for loss of flavor or spoilage of



coffee is oxidation, ascribable to the presence of air in contact with the coffee between the time of roasting and the time of entry into the home. Another cause of deterioration is moisture. Hence, it has been the aim of all packaging engineers working on the coffee problem to devise a means of removing air from around the coffee particles. It is for this reason that high vacuums are pulled on canned and glass packed coffee.

However, it would obviously prove difficult to pull such a vacuum on a non-rigid container and—looking at the other face of the same coin—this is in fact one of the reasons why structurally rigid containers, such as metal cans and glass jars, have heretofore been utilized.

The "Flav-O-Tainer," however, secures the removal of air from the package by allowing a gas (carbon dioxide which is almost twice as heavy as air) to flow into the package at the same time that the coffee falls into it. In actual practice, it is claimed that 90 to 95 per cent of the air is successfully removed by this method at the Danne-miller Coffee Co. and other plants now using this new type of package.

It may be asked at this point why so simple a container and so simple a method of displacing air had not previously been developed. The reason is found in a peculiar property of cyclicized rubber resin which permits it to act as a valve, permitting passage of carbon dioxide through the walls of the container, but preventing passage of oxygen in the opposite direction toward the coffee. Lacking this quality, the carbon dioxide gas, which is developed within the coffee cells by destructive distillation during the roasting process, would, within a short time, literally "explode" the container.

Carbon dioxide inserted into the package at the time of packing thus serves merely a temporary utility until additional carbon dioxide shall start to be liberated by the coffee particles. When such action begins, the pressure within the bag would normally increase substan-

tially. However, the property of the latex compound in passing carbon dioxide through its walls literally "valves" the gas away and attains a pressure at a level and balance with that of the outside atmosphere.

As carbon dioxide is freed by the coffee particles, it volatilizes the flavoring constituents in the coffee. Thus, during the ten day period after roasting "within which 95 per cent of the carbon dioxide bleeds out of the cells," the exposed coffee would normally lose a major portion of its flavoring constituents. Since these, however, cannot pass through the walls of the bag as can carbon dioxide, a saturation of the flavoring constituents within the bag occurs very shortly after the bag is sealed and, after such saturation, volatilization of the flavoring constituents is arrested.

Thus by minimizing the loss of the flavoring constituents and by preventing the access of any substantial quantity of oxygen to create rancidity of the oils and breakdown of the flavoring constituents, the new container provides a high degree of preservation for the product over long periods of time.

The use of the outer paper bag permits the development of bag designs essentially similar to those utilized on previously manufactured paper coffee bags and the container is in all other merchandising aspects very much the same as the paper bag. The ingenious modification of paper bag making machines has been developed to produce this double walled container at high speeds. Within the plant, it is capable of handling on both semi-automatic and fully automatic equipment. The present set-up in the Danne-miller plant utilizes a weighing hopper specially equipped with a filling head to provide a suitable admixture of gas. As the containers are filled at this hopper, they are passed on to a heat sealing unit, suitably mounted with guards and guides, so that on approaching the heat sealing plates they are properly folded to provide a suitable seal. Since the gas filled

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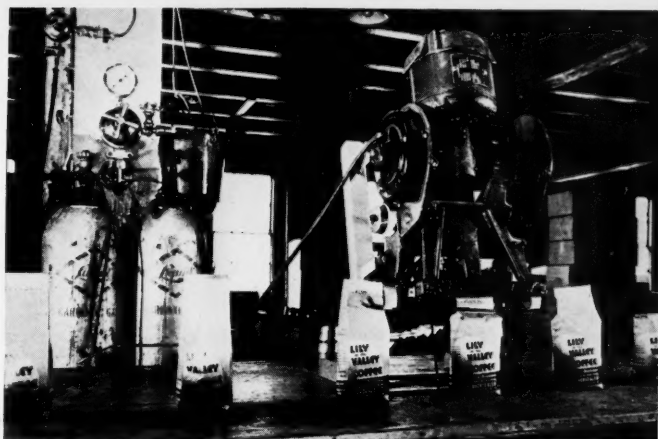
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into the container is heavier than air, it is necessary to make an instantaneous seal immediately. Several seconds may elapse before the seal is effected.

Tests conducted both prior to the adaptation of the container and in retail markets since such adaptation are reported to have proved exceptionally favorable acceptance for the package by both consumers and retailers. This has, no doubt, been somewhat accelerated by the care which has been taken to provide reasonable explanations for consumers as to the nature of the container.

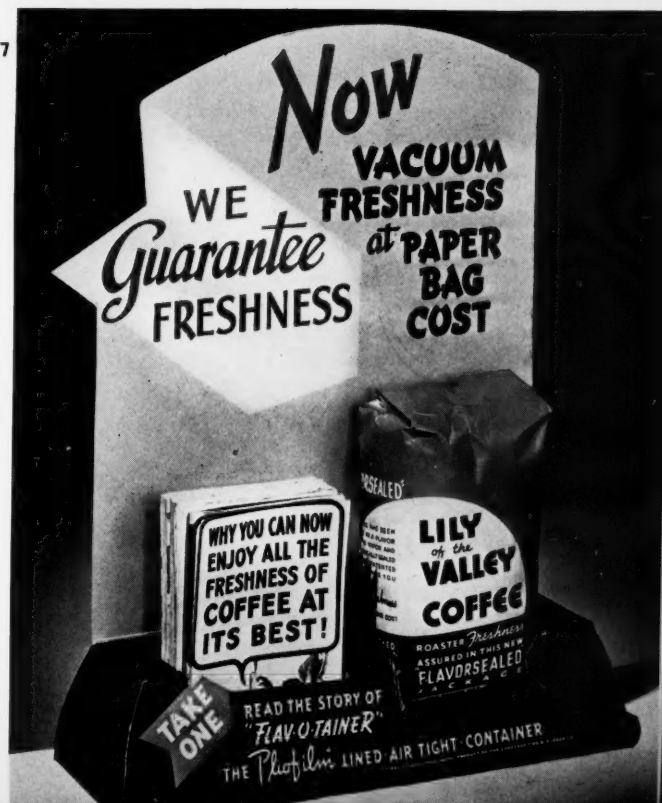
Other manufacturers of products requiring somewhat similar preservative factors have likewise evidenced much interest in the new container and the new packaging technique and extensive studies are now being made, in various plant laboratories, investigating the possibility of applying the same or similar methods to the packaging of a wide variety of products in combination Pliofilm and paper bags utilizing a carbon dioxide fill.

Credit: Bag developed and manufactured by Thomas M. Royal & Co. Pliofilm manufactured by The Good-year Tire & Rubber Co. Carbon dioxide by the Liquid Carbonic Corp. Scales by National Packaging Machinery Co., division of U. S. Automatic Box Machinery Co., Inc. Sealing machines by Wrap-Ade Machine Co.



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3. Diagrammatic layout of the mechanical set-up for filling and sealing the gas-filled bag. 4. Weighing unit equipped with special gas-filling head. 5. Panoramic view shows experimental layout at the Dannemiller Coffee Co. Weighing unit and check weighing scale at left, sealing unit at right with carbon dioxide cylinders to the right of the sealing machine. 6. Close-up of sealing mechanism showing method of mounting and arrangement of guard rails and guides. 7. Display used to introduce the new package to the public and to distribute explanatory booklets.

Easier Opening For Old Golds

New "zip top" makes for greater consumer convenience without loss of package protection



A mere twist of the wrist is all that's required to remove the top of the outer cellophane wrapper from the new "zip top" package. By pulling the tab around the package, the jacket is cut along a top line, leaving the lower portion of the jacket as a protective cup wrapper to be retained until the cigarettes are consumed. At the left may be seen components of Lorillard's new "zip top" package for Old Golds. Printed labels and paper-backed aluminum foil are used to make up the package proper, after which a thin cellophane tear strip or "zip top" is applied, followed by two cellophane jackets.

On first thought, there is nothing particularly unusual about a cigarette package. This little item has become so familiar that the casual observer is inclined to overlook the fact that it is serving a very definite and useful packaging purpose. Yet here is a commonplace unit that embodies as many of the principles of good modern packaging as any other one type of package today. Having already reached a high plane of quality in the cigarettes themselves, the manufacturers are coming more and more to rely upon the package to promote sales in this product's highly competitive market.

Latest evidence of package pioneering in this field is P. Lorillard's new "zip top" package for Old Gold Cigarettes. Designed solely for the convenience of the consumer, the new pack is equipped with an integral cellophane tear-tape, or "zip top," permitting the quick removal of the top of both of the cellophane wrappers. Thus by a clean, non-messy job, the user has ready access to the cigarettes and still retains the original double cellophane jacket as a cup wrapper to protect the package in pocket or purse.

The introduction of the "zip top" package climaxes a history of packaging firsts for Lorillard. For example, when aluminum foil first reared its head as a likely material for cigarette packaging, this company saw definite

possibilities in its moisture-proofing and non-toxic properties, and became the first to standardize on it for this purpose by adopting it exclusively for Old Golds. Likewise, it was Lorillard that improved upon the traditional transparent wrap and followed the axiom that "if one is good, two are better," introducing its package with the double cellophane jacket. Retaining all these previous developments, and their attendant advantages, Lorillard comes now with its newest contribution to easier opening in the "zip top" package, scheduled to go into country-wide distribution next month.

The introduction of this latest package, combined with a resultant growing volume of sales, is bringing about some interesting changes in packaging operations in the Old Gold plant at Jersey City, N. J. Specially-designed equipment has been installed to produce this new pack which exemplifies the last word in cigarette packaging machinery.

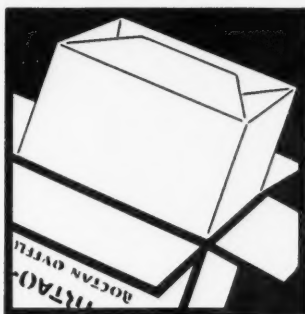
To watch one of these machines operate is a packaging education in itself. The cigarettes are supplied from trays filled at the cigarette-making machines, and the trays are slid into position over a feed hopper one at a time. As the cigarettes gradually work down through the hopper to the point where they are discharged, the materials which make up the package proper are simul-

The Pneumatic

DOUBLE PACKAGE MAKER

HERE'S an entirely new packaging technique, worthy of careful study by many manufacturers of packaged dry products. It presents a radical departure from the orthodox method of handling side-seamed folding cartons. With this Pneumatic unit, innumerable variations in the construction of double packages are now possible. Note these new features:

- (a) Inner and outer packages made from roll or sheet stock.
- (b) Side seaming of both sections done on this machine.
- (c) Inner and outer packages can be separate or glued together.
- (d) Eliminates bag maker's profit on double wall bags.
- (e) Fillers, weighers and top closers can be hooked in line.
- (f) Compact design conserves up to 50% on floor space.
- (g) Nearly any packaging material for inner or outer sections.
- (h) Speeds 35 to 65 double packages per minute.
- (i) Unequaled economy in double package construction.



1 Printed cardboard cartons with inner paper liner, delivered ready for filling.

2 Plain shell and printed wrap construction is also possible with this unit.



3 Makes double wall bags of Kraft, or glassine and Kraft, or most any materials.



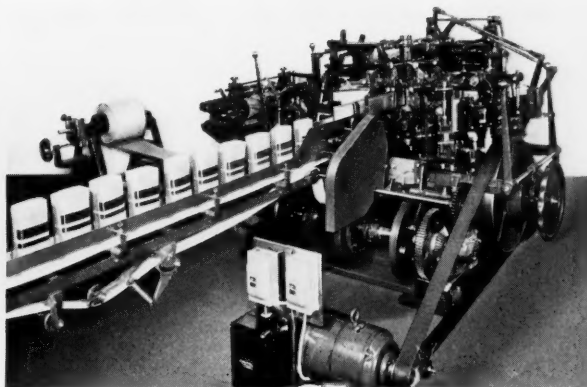
ASK PNEUMATIC FOR DETAILS ON DOUBLE PACKAGES FOR YOUR PRODUCT

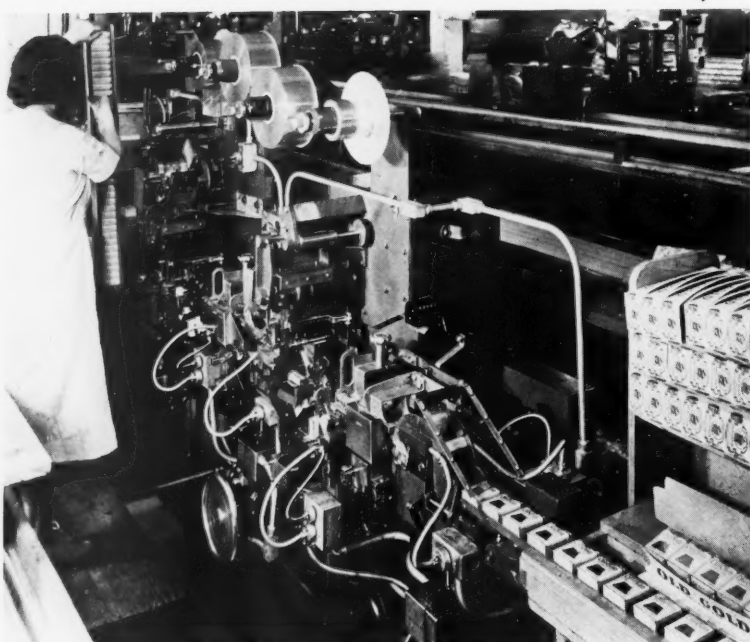
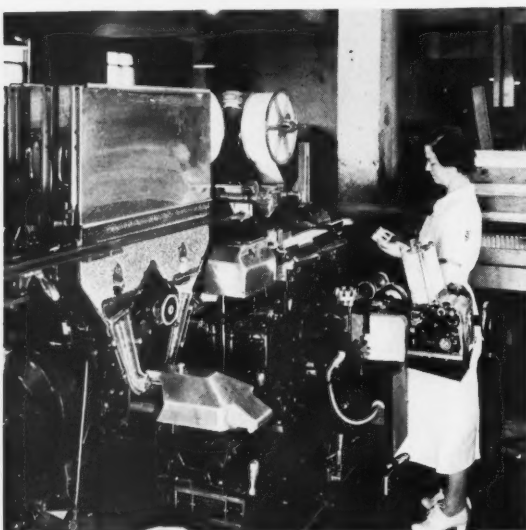
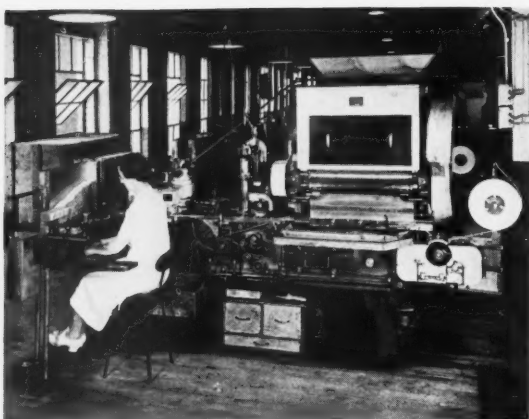
PNEUMATIC SCALE CORPORATION, LTD.

71 Newport Ave., Quincy, Mass. (Norfolk Downs Station)

Branch Offices:

NEW YORK · CHICAGO · SAN FRANCISCO · LOS ANGELES





taneously fed from rolls to the package-forming mechanism. The continuous strip of aluminum foil which comes from the roll is cut into correct lengths and wrapped around a hollow mandrel. A printed label is picked up, adhesive applied, and then it is neatly wrapped around the same mandrel over the aluminum foil. As the mandrel revolves, mechanical fingers make the bottom fold, which is then tightly sealed.

As the cigarettes come out of the hopper, they are forced into a "compression box" in groups of twenty. A sensitive electrical device detects whether the count is correct and the cigarettes perfect. In the case of a short or long count or a defective cigarette, the package is automatically thrown out.

The compression box revolves from left to right and meets the package mandrel rotating from the opposite direction. At this point, the cigarettes are forced from the compression box into the cup and both pushed off in the same motion. The filled pack then passes through a tucking device which folds the aluminum foil on the top of the package to close it, after which the revenue stamp is applied, thus sealing the container.

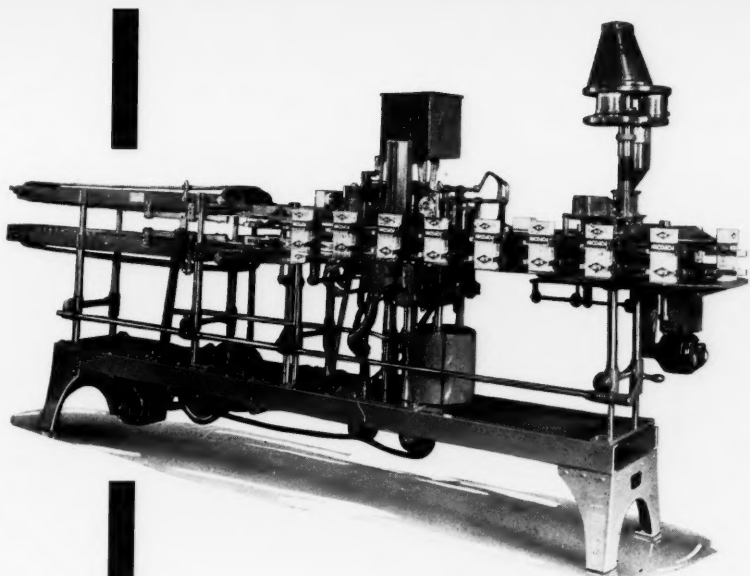
A small conveyor then takes each of the packages to the "zip top" wrapping machine, a part of the combination unit. Here the two cellophane jackets, with the "zip top," are applied in two quick operations. At the discharge end of the machine, a girl operator puts the packages into ten-pack cartons which are automatically conveyed to another machine which seals them. Finally, the cartons are packed in corrugated shipping containers to be sent to all parts of the country.

As in the case of a number of other packages, those for cigarettes must preserve the product's flavor and provide an efficient and convenient means (Continued on page 92)

2. Cigarettes by the millions come from machines such as this one in the Old Gold plant. Old Golds are cut from a continuous cigarette made by passing a strip of cigarette paper through a die which compresses and seals the paper around the shredded tobacco supplied from a hopper. As the cigarettes come from the machine, they are placed in racks ready for inspection and packaging.

3. These modern, high-speed machines are used to package Old Golds. Paper-backed aluminum foil is supplied from rolls to form the inner wrap, while individual printed labels are fed into the machine from stacks. While the cigarettes work down through the feed hopper on the left, aluminum foil and labels are formed into "cups." By means of mandrels rotating in opposite directions, the groups of cigarettes and cups are aligned at which point the cigarettes are forced in. Mechanical fingers fold the package closed and a Federal revenue stamp is applied. Sealed packs may be seen emerging at the right on a conveyor which will take them to the "zip top" machine.

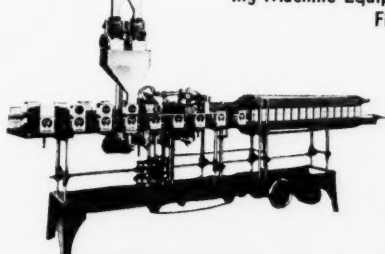
4. Lorillard's new "zip top" unit applying "zip top" tear strips and cellophane jackets to the filled packages. Packages are fed from the hopper on the left, pass through the wrapping mechanism and emerge at the right where they are placed in cardboard cartons.



Packomatic P-T Carton Sealing and Filling Machine Equipped with Volumetric Filler.

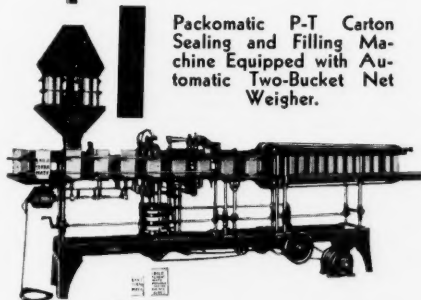
**EASILY
ADJUSTABLE
FOR A LARGE
RANGE OF
SIZES!**

FURNISHED WITH THE CORRECT
TYPE WEIGHER OR FILLER FOR
YOUR PRODUCT.



Packomatic P-T Carton Sealing and Filling Machine Equipped with Automatic Two-Bucket Net Weigher.

PACKOMATIC POCKET TYPE CARTON SEALER AND WEIGHER



Packomatic P-T Carton Sealing and Filling Machine Equipped with Bulk and Dribble Net Weigher.

These machines require only one operator, all operations of sealing top and bottom of carton and filling carton are completely automatic. Operates at speed of up to 30 packages per minute.

Handles cartons ranging in size from $2\frac{1}{2}$ " to $6\frac{1}{2}$ " wide x 1" to 4" deep x 4" to 10" high. No change parts required, easy to change from one size to another.

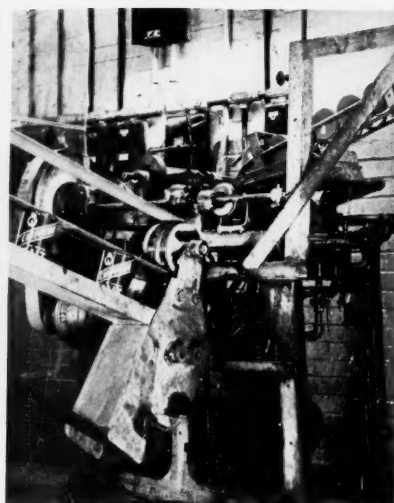
When you invest in Packomatic Machinery you get lower cost per package, higher operating efficiency, and better packages. Let us prove it to you. A letter or wire will bring complete details!

PACKOMATIC
PACKAGING MACHINERY
J. L. FERGUSON COMPANY, JOLIET, ILLINOIS

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DENVER
SAN FRANCISCO

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NEW YORK
ST. LOUIS
LOS ANGELES

BOSTON
NEW ORLEANS
SEATTLE



1. A group of the latex compound coated packages of The Ohio Salt Co. 2. The packages are pre-formed and pre-labeled and are then run through a coating machine which applies the compound.

MOISTURE PROTECTION FOR SALT

by F. E. GILBERT*

Cyclicized rubber resin applied to the pre-labeled can reported eminently effective

Table salt, being the most common and probably most extensively and universally used food product in the package line, is generally given little consideration beyond its absolute necessity for human existence. In past times, it was unnecessary to have a "dress up" package for salt, but modern competition and the trend to packaging has changed the salt package to an attractive, efficient and competitive article on the retailer's shelf. Competition, however, has sharpened the problem since salt is a low priced item and must necessarily have a package of relatively low cost and one capable of handling on high speed machinery.

The effect of dampness in connection with salt is that it has a tendency to cake or harden and, in by-gone years, the common table salt sack was often quite hard and had to be broken up previous to retail sale. Due to this peculiar condition, it has been necessary to change the method of manufacture as well as the package material entering into the packing of salt. Experiment has proved that certain types of moisture resisting boards are very helpful in eliminating moisture entering from the outside. Further experiment proved that if a label highly coated with a moisture resistant material could be found and one which would retain a high gloss or satin finish, as desired, the package could be beautified as well as being moisture resistant to such a degree that caking and hardening would not take place.

* The Ohio Salt Co.

With all this information, we attempted to obtain a material, as well as a process for applying the same to a labeled round salt can. Necessity caused hesitation in varnishing in the flat sheet, as our private label business demanded small quantities of labels and prompt service. It would be prohibitive to purchase such small quantities of private labels and expect them to be varnished or coated, so a machine put out at that time, which was designed for varnishing a round can, was purchased. After many changes made upon it, varnishing of round cans became a fact. The cans are automatically fed to a labeling machine and from there are rolled into a varnishing machine consisting of six oscillating composition rolls through which they pass, revolving at high speed and obtaining any desired coating and gloss. The operation is very rapid, the cans passing through at the rate of 120 to 150 per minute.

This machine performed very efficiently, with practically no scrap and little loss from evaporation. The only difficulty lay in the fact that the coating material was not moisture resistant and would chafe when the packages rubbed together after packing. Hence, a new vehicle for coating labels had to be found, having the qualities of lustre, ease of application, economy in coverage and last and very important, moisture resistance.

A recently developed cyclicized rubber resin was tried out and provided a performance so highly satisfactory that it is now used exclusively for (Continued on page 92)

Have you seen it?



PACKAGERS DIGEST
OF S & S PACKAGING EQUIPMENT

- Carton Filling and Sealing Machines** Page 1
As sealing machines only or for filling by weight or volume and for sealing and for speeds up to 130 p.m.
- Filling Machines** Pages 2 to 5
Gross weight, net weight and volumetric, with centrifugal feed for free flowing products and auger feed or conveyor feed for others. Speeds up to 120 p.m.
- Transwrap Packaging Machines** Pages 6 and 7
For forming, filling and sealing cellophane, pliofilm or other material packages taking the printed or unprinted web from the roll at speeds of 60 p.m. and up.
- Bag and Envelope Fillers and Sealers** Pages 8 and 9
For soft drink powder or for individual servings of chocolate powder, and for sealing bag liner in carton independently of flaps of carton.
- Complete Packaging Lines** Pages 10 and 11
Fully automatic from start to finish and including bag inserting and bag closing machines.
- Tight-Wrapping Machines** Page 12
Fully automatic or semi-automatic and fully adjustable for producing a moisture resisting and weevil tight package.
"Seven Minutes Reading Time"

STOKES & SMITH CO.
PACKAGING MACHINERY
4928 SUMMERDALE AVE., PHILADELPHIA, U. S. A.
British Office: 23 Goswell Road, London, E.C. 1
Australia and New Zealand: The Sydney & Co., Ltd., Sydney
PAPER BOX MACHINERY
Printed in U. S. A.

Have you received your copy of the Packagers Digest of Stokes & Smith Packaging Equipment? This new booklet, just off the press, gives a summary of the complete line of S&S Packaging Machines. Every user of packaging machinery should have it on file.

Write for your copy today. You will probably find it contains many useful suggestions.

STOKES & SMITH CO.

PACKAGING MACHINERY

PAPER BOX MACHINERY

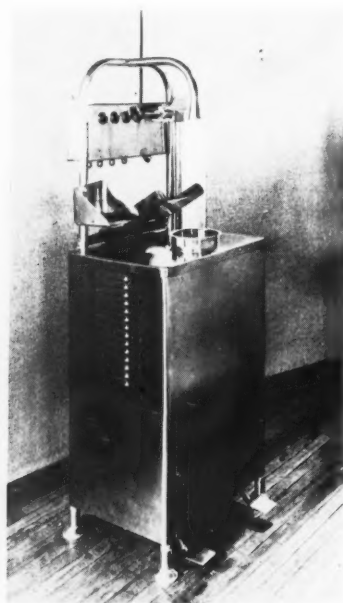
FRANKFORD, PHILADELPHIA, U. S. A.

Equipment and Materials

NEW DEVELOPMENTS IN PACKAGING MACHINERY • METHODS and SUPPLIES

CRY-O-VAC PACKAGING BENCH

The Cry-O-Vac process of covering irregular shaped foodstuffs with a taut, close-fitting bag made of a specially compounded, purified rubber latex, as developed by the Dewey and Almy Chemical Co., is facilitated by the



Cry-O-Vac packaging bench. The unit incorporates a vacuumizing nozzle for exhausting air from within the bag and has a heat sealing block for closing the bag. Two foot pedals control operations—one pedal controlling the vacuum for exhausting air from the bag, the other controlling vacuum for expanding the bag. A chute carries the finished product from the bench and there is a convenient receptacle for Cry-O-Vac bags. All exposed surfaces of the machine are made of stainless steel. A $\frac{1}{4}$ hp. universal motor direct-connected to a "Moto-air" vacuum pump is utilized.

RE-SEALING CAP

A new type of re-sealing cap for preserving the carbonation in opened beverage bottles is the "Tytest" cap by Metallo-Plastics, Inc. The closure is molded of Durez plastics in red, blue and green color schemes. It has a flat surface on top to carry the advertiser's or brand name. The inside of the molded cap is equipped with a spring ring which is fitted into a special groove properly



spaced from the rubber sealing liner. "Tytest" will fit standard lip bottles such as for beers, ginger ales, sodas, etc. The cap is easily applied and easily removed by a simple tilt and turn, yet, it is claimed, it re-seals very effectively to preserve the product. The closure is molded by Plastic Products, Inc.

WRINKLE FINISH FOR PAPERS

New Wrinkle, Inc., has announced the development of "wrinkle finishes" for coating flexible materials such as fabrics, paper and leather. The material is applied to the fabric or paper by coating or spraying and dries to a finely figured finish of uniform texture—from small to coarse, depending upon the desires of the manufacturer. Once it is applied, it is claimed, the material will not chip or peel. Wrinkle finishes are available to converters under licensed agreement.

PLIOFILM STRETCH-WRAP MACHINE

Development of a stretch-wrap machine for packaging of articles of various miscellaneous shapes in Pliofilm has been announced by The Goodyear Tire & Rubber Co., Inc. Known as the Pfeiffer Pliofilm Stretch-Wrap machine, the equipment was developed by Fred Pfeiffer in conjunction with Goodyear technical men and will be manufactured by The Stokes & Smith Co.

The stretch-wrap machine takes advantage of the



Announcement

NATIONAL ADHESIVES CORPORATION

will change its name to

NATIONAL STARCH PRODUCTS INC.

on or about September 1, 1939

•

IN RECENT YEARS, in addition to manufacturing our quality adhesives, gums, pastes, and sizings, our company has become an important factor in the manufacture and processing of starches for foods, confectionery, textiles, and papers, as well as in the production of lacquers, thermoplastics, and similar materials.

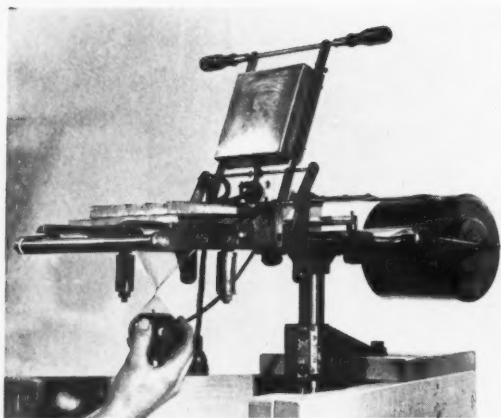
For these reasons we have decided to change our name to NATIONAL STARCH PRODUCTS INC. and will continue to manufacture a full line of adhesives as heretofore, operating as NATIONAL ADHESIVES DIVISION of NATIONAL STARCH PRODUCTS INC.

We also announce the purchase of PIEL BROTHERS STARCH CO. of Indianapolis, which will be operated as a division of NATIONAL STARCH PRODUCTS INC.

Thanks to our many friends for the confidence which has made possible our steady growth and expansion.

NATIONAL ADHESIVES CORPORATION

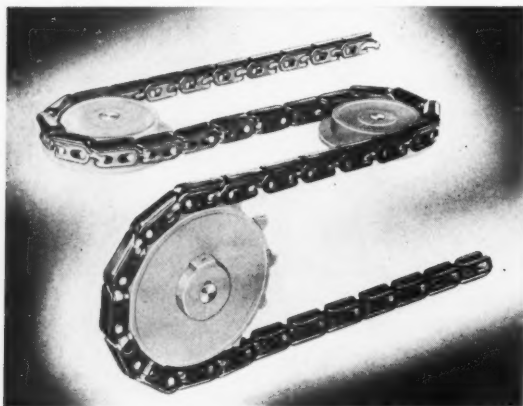




following Pliofilm characteristics: stretchability when heated, strength increase in all directions when so stretched, resistance to puncture when stretched. Since Pliofilm self-seals when heated, the article being wrapped can be likewise sealed in one operation. Thus the machine enables a quick, inexpensive wrapping process with Pliofilm which assures transparent protection to the wrapped object against the things to which Pliofilm is impervious, including air.

FLEXIBLE STEEL CHAIN

The Standard Conveyor Co. has developed a new hardened steel chain which is flexible, durable and simple in construction. The links are made from mild steel bars treated with a special hardening process, producing units of long wearing qualities and having uniform tensile strength. The tough non-breaking qualities of mild



steel are retained, but the wearing surfaces have a deep hardened case to produce long life, even under the severe operating conditions which are often imposed on this type of chain when it is dragged in a metal track or curved around friction bends. The cast alloy connecting couplers are inside and protected by the hardened links. The carrying surface is entirely closed to prevent nails or other irregularities of the commodities from catching. All edges of the hardened steel chain are beveled or rounded for smooth performance.

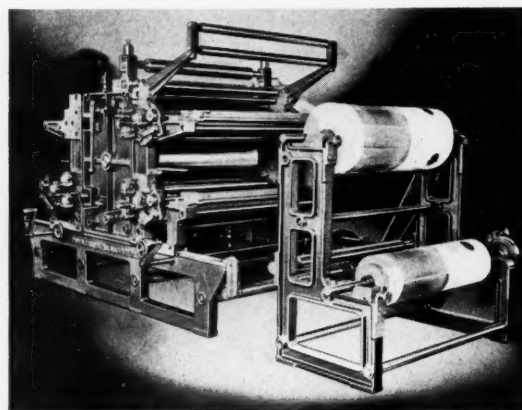
RIBBON DISPENSERS

Freydberg Bros., Inc., announce the development of a new self-dispenser unit for their Excell-O ribbons. Each 500 yd. of $\frac{1}{4}$ -in. ribbon will now be packed on its own spool holder. This practical unit is made of metal and is designed to fit the standard 500-yd. Excell-O spool in such a manner that the ribbon is most easily handled. The dispenser is equipped with a cutting device so that desired lengths of ribbon can be quickly and conveniently cut off with little loss of time or product.

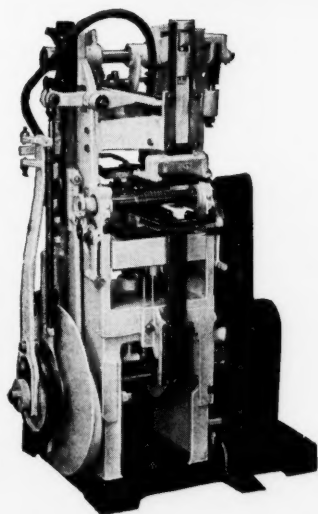


ARC TYPE WEB PRESS

A new arc type web press that will print from one to six colors, with rotary register while the press is running, has been announced by the Paper Converting Machine Co. The speed of the press depends upon the size of the cylinder, kind of ink used, type of printing and the paper stock to be printed—range of speed 300 ft. to 800 ft. per minute. Arranged with printing cylinders grouped around the central tympan, this type of press is designed to use rubber plates, rubber plates with metal backing or metal plates. Illustrated here is a press arranged to use rubber plates with elastotype back to affix the plates to the printing cylinders. One of the claimed features of this unit is that no oil or grease can drop on the web while entering or leaving the press since the web is carried in an out of the way position.



On Every Production Menu



"PROFITS by the PONY LABELRITE!"

No matter whether your labeling job consists of something as out-of-the-ordinary as the sealer on the top of a salt package, or the wrinkle-free application of a perfectly registered label on the side of your bottles, Pony Labelrite will do the job at a profit for the production department. It costs *less* to use a Pony—as hundreds of production executives have discovered. Install one, and you'll standardize on the silent, speedy, labor saving and profit making Pony Labelrite.

Send for catalog!



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ST. PAUL
CINCINNATI
TORONTO, ONT., CANADA
LONDON, ENGLAND

Plants and Personalities

ANNOUNCEMENT has been made by National Adhesives Corp., New York, N. Y., that the company name will be changed to National Starch Products, Inc. The present National Adhesives Corp. will operate as a division of National Starch Products, Inc., and will continue to manufacture a full line of adhesives, lacquers and allied products. The management of National Starch Products will be identical with that of National Adhesives, with Alexander Alexander as chairman of the board and Frank Greenwald as president. Simultaneous with this announcement, it was disclosed that National has purchased the Piel Bros. Starch Co., Indianapolis, Ind., which will also be operated as a division of National Starch Products, Inc.

HAROLD D. HOPP has been appointed assistant manager of the Owens-Illinois Glass Company's Chicago branch sales office. Mr. Hopp formerly served as sales manager of the liquor ware division at Toledo, Ohio. Eugene A. Hildreth becomes sales manager of the liquor ware division combining these duties with those of manager of the closure sales division.

IRA C. KELLER has been elected to a vice presidency of the Container Corp. of America, Chicago, Ill. In his new post, Mr. Keller will have supervision of sales and manufacturing of six of the company's Illinois, Indiana and Ohio properties.

WILLIAMSON GLUE AND GUM WORKS, Chicago, Ill., have changed their corporate name to Williamson Adhesives, Inc. The company will operate at the same address and will continue under the direction of D. V. Williamson, president.

HERMAN B. LERMER, former vice president and treasurer, has been elected president and treasurer of the Hygienic Tube & Container Corp., Newark, N. J. Julius Silver has been elected secretary and general counsel.

DUREZ PLASTICS & CHEMICALS, INC., is the new corporate name of the company formerly known as General Plastics, Inc., North Tonawanda, N. Y.

FRED W. SUTHERLAND, executive vice president and secretary of the Sutherland Paper Co., died August 11.

T. RAYMOND PIERCE has been elected a vice president and Wilbur F. Howell has been named secretary of Robert Gair Co., Inc., New York, N. Y., as announced by George E. Dyke, president of the company.

JACK QUILLMAN has joined the plastics department staff of the General Electric Co., with offices at 570 Lexington Ave., New York, N. Y.

RONALD DONOVAN, a vice president of the General Box Co., Chicago, Ill., died in New York recently in an accident occurring in the Long Island station of the Pennsylvania railroad.

GEMLOID CORP. has transferred its general offices to 79-10 Albion Avenue, Elmhurst, L. I.

THE KAUMAGRAPH CO. has completed the removal of its plant from New York City to Poplar Street, Wilmington, Del. New York offices are being maintained at 16 East 34th Street.

HERCULES POWDER CO., Wilmington, Del., announces the appointment of H. F. Kolb to a position on the West Coast with the Casein department of the paper makers chemical division. J. B. Johnson has been appointed director of purchases to succeed Mr. Kolb.

SAM W. H. JONES, formerly eastern representative of Plaskon, Inc., has become associated with the plastics department of the Gorham Co., Providence, R. I. Mr. Jones will be in charge of sales.

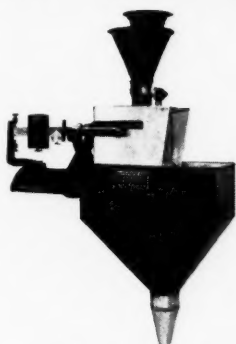
THE BUFFALO, N. Y. office address of the Shellmar Products Co. has been changed from 614 Walbridge Building to 1110 Walbridge Building.

THE BEVERIDGE-MARVELLUM CO., Holyoke, Mass., has changed its name to The Plastic Coating Corp. Management and personnel remain the same.

THE 1939 SEFTON HOLIDAY CONFECTION BOXES, produced by the Container Corp. of America, Chicago, Ill., are colorfully illustrated and described in a new folder issued by the Container Corp. The Christmas animal series, the toy village series and many Christmas holiday boxes are shown. Prices and specifications for the Sefton Holiday confection boxes are listed. These stock boxes are available in 1/4-lb., 1/2-lb and 1-lb sizes and in lots of 1000 and upward.

In the Packaging Pageant section of the July, 1939 issue of Modern Packaging, the Stop Spot cleaning fluid can with applicator top was wrongly credited as to source of supply. The applicator was produced by the Michigan Metalcraft Co.

NET WEIGHING—GROSS WEIGHING—VOLUME FILLING—PACKING



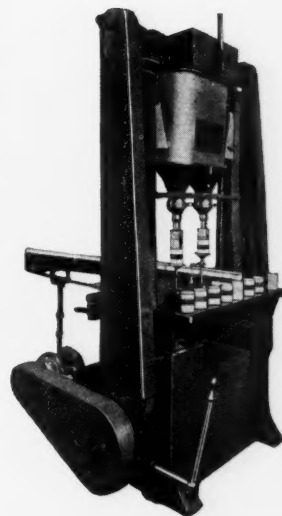
MODEL GE SCOTT NET WEIGHER:

Gravity feed for free-flowing products.
Speed: 20 to 35 per minute.
Capacity: $\frac{1}{4}$ lb to 3 lbs.
Tripod or pipe mounting optional.
One of several models of power feeders may be attached for handling non-free-flowing materials.

Do you package such materials as coffee, tea, cereals, spices, cocoa, flour, face powder, talcum, soap powder, etc.? Then we have a machine to suit your needs—from the simplest type gravity feed Net Weigher to our automatic Net Weighers and Gross Weighers. Our auger-type Gross Weighers, Packers, and Volume Fillers are exceptionally accurate and practically dustless, and are used in countless plants on a variety of different products and containers.

Illustrated on this page are a few of our machines with their general specifications, but these merely touch briefly on our wide line of packaging equipment.

Send us samples of your package and product, and let us know your requirements. We have a model to suit your needs.



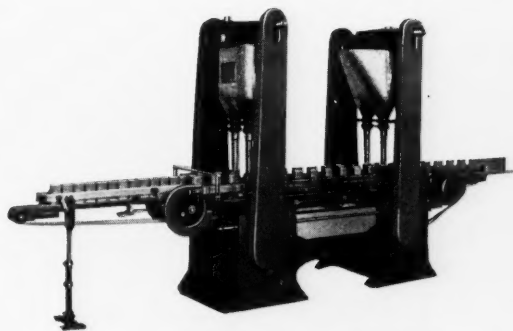
MODEL MH BOND GROSS WEIGHER

Semi-automatic
Speed: 10 to 50 per minute.
Operator: One. Adjustable for packages 8 inches square or round and up to 14 inches high.



MODEL MG BOND GROSS WEIGHER

Semi-automatic
Speed: 10 to 30 per minute.
Operator: One. Adjustable for packages 8 inches square or round and up to 14 inches high.



MODEL MN BOND GROSS WEIGHER

Fully automatic
Speed: 50 to 120 per minute.
Operators required: None.
Adjustable for packages up to 5 inches long by $3\frac{7}{8}$ inches wide and up to 10 inches high. Automatically divides containers into two lines and assembles filled ones into one line.

U. S. AUTOMATIC BOX MACHINERY CO., INC.

ALSO OWNING AND OPERATING THE NATIONAL PACKAGING MACHINERY CO.
CARTONING MACHINERY CORPORATION

18 Arboretum Road, Roslindale (BOSTON), MASS.

Branch Offices:

NEW YORK

CHICAGO, ILL.

For Your Information File

Unless otherwise indicated, copies of catalogs, booklets, etc., mentioned in this department may be obtained without charge by writing to the sponsoring company at the address given.

"LITHO MEDIA" (Published by Litho-Media, Inc., New York, N. Y. \$15.00). This 210-page lithographed volume, size 11 in. by 15 in., is a graphic and factual demonstration of the selling power of lithography. A vast amount of useful data on this important advertising medium is presented in an interesting manner, covering the field from a sales-producing point of view.

Treating the technical aspects of lithography in only the briefest fashion, "Litho Media" emphasizes the sales potentialities of each of the many lithographed advertising media. A total of 50 case histories of recent advertising campaigns tell how lithographed media actually make sales. These articles, for the most part, have been written by the advertisers themselves. Beautifully styled, the book contains actual samples of current lithographic production ranging from a tiny identification stamp to a 24-page booklet.

The constructive and intelligently planned book should prove of interest and value to both lithographers and to purchasers of lithography, indicating as it does the path to many possible profit-making opportunities.

"INDUSTRIAL MARKET HANDBOOK" (Domestic Commerce Series No. 107. Available through Superintendent of Documents, Washington, D. C. or district offices of the Bureau of Foreign and Domestic Commerce. \$2.50). The handbook, first of its kind ever published, contains complete figures on industrial production, employment, value of products, cost of material, fuel and power, and output per wage earner for each of the 3070 counties in the United States, and similar data for every city of more than 10,000 population. The figures in the handbook pertain to 1935, the latest year in which information in this form is available.

Information in the handbook is useful for establishing new sales territories or reappraising old ones, for setting up sales and production quotas, planning sales and ad-

vertising campaigns and deciding on channels of distribution likely to be most profitable to the manufacturer.

Included in the handbook is a tabulation of the county locations of 169,111 manufacturing plants by kinds of industry. Parallel tables covering the mining industry with a county location table for each of the 23,000 mines by type of mine are also in the handbook. Operation summaries showing the number of firms engaged, cost of material, fuel and power, value of products and the number of wage earners are included on a national basis for each of the 280 industries covered in the handbook. The publication also contains information dealing with channels of distribution and manufacturing operation costs, as well as a key table on wholesale operation in a number of heavy industries.

The handbook was prepared as a cooperative study by the Bureau of Foreign and Domestic Commerce, the Census Bureau and the Bureau of Mines.

CONTAINER CORPORATION OF AMERICA, Chicago, Ill., has issued a new folder sampling Muxum—a solid fibre board claimed to be water-proofed to an extraordinary degree and, hence, capable of producing a container that would withstand the damaging effects of moisture. Such board would be of particular use for products moving in and out of cold storage or refrigerator cars, where condensation is a definite hazard for ordinary container boards.

"WHO GETS THE KVP DOLLAR?" is the title of a booklet written by R. A. Hayward, president of the Kalamazoo Vegetable Parchment Co., Kalamazoo, Mich. Factual data on the company's business, how KVP disposes of each sales dollar and a rounded picture of the organization are offered through charts and a questions-and-answers method of summarizing information.

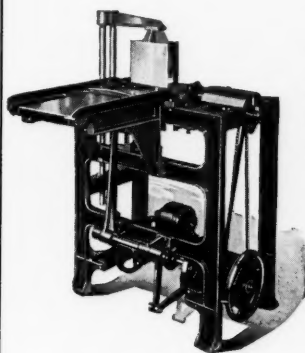
THE MARVELLUM CO., Holyoke, Mass., has issued three swatch books on three new types of cover papers. One sample book presents samples and information on the Silkay cover line, another booklet offers data and samples on the Marco cover line and a third swatch book gives data on Mural covers. Complete specifications and the colors available for the three types of cover papers are included in the swatch books.

"THE MANUFACTURE OF PAPER BAGS," issued by the Union Bag & Paper Co., New York, N. Y., is the fifth in a series of pictorial folders. The publication graphically presents, through illustrations and text, the story of the business of making paper bags. Diagrammatic sketches of types of bags are shown and steps in the production of bags, the printing of bags, bag inspection, etc., are likewise presented.

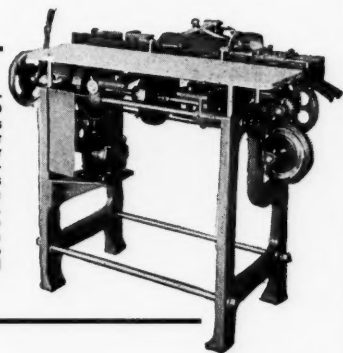
In the article titled, "What To Do—and What Not To Do—About Christmas," appearing in the August, 1939 issue of Modern Packaging, C. R. Whiting Co., Inc., was erroneously stated as being located in Hoboken, N. J. This company's location is Hackensack, N. J.

Are *YOU* Setting Up or Closing *YOUR* Cartons ... by Hand?

If you are using a die cut carton which is supplied to you flat and must be set up in your plant before filling, you will find, upon investigation, these JUNIOR CARTON PACKAGING MACHINES will reduce your handling cost to a minimum.



This PETERS JUNIOR CARTON FORMING AND LINING MACHINE sets up 30-40 die cut cartons per minute, interfolding the sheet liner in the ends of the carton as it is set up. Machine requires only one operator and can be made adjustable to handle a wide range of carton sizes. After the cartons are set up, they drop onto a conveyor belt where they are carried to the packing table or filling machine. Fully automatic SENIOR Model machine also available for productions up to 60 cartons per minute.



This PETERS JUNIOR CARTON FOLDING AND CLOSING MACHINE closes 30-40 die cut cartons per minute, requiring no operator since the cartons enter machine on conveyor belt as open, filled cartons and leave machine completely closed. Can be made adjustable to close a wide range of carton sizes. For productions up to 60 cartons, SENIOR Model machine is available.

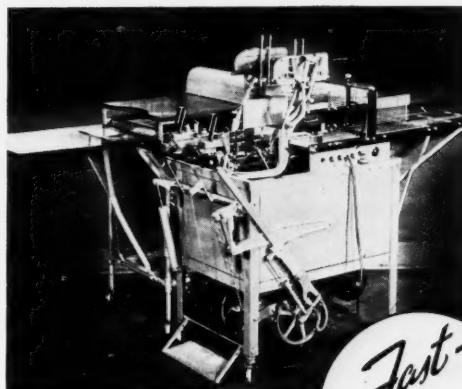
Send us a sample of each size carton you are interested in handling on the above equipment or advise their sizes. We will be pleased to recommend the most economical and efficient machines to meet requirements.

PETERS MACHINERY COMPANY
GENERAL OFFICE AND FACTORY
4700 RAVENSWOOD AVENUE, CHICAGO, ILL.

The MILLER MODEL MPS now **WRAPS** and **LABELS**



in ONE operation



MILLER MODEL MPS
WRAPPING MACHINE

*Fast-
Flexible*

The Miller Model MPS can now be equipped to wrap packages and label them with printed* bands . . . all in one speedy operation.

Strips of printed band, fed from a roll, are neatly attached to the Cellophane wrappers. Beautiful packages are produced in this manner . . . at amazingly low cost. Hand labeling or banding is eliminated. Labor and material savings total as much as 65%.

Learn more about this new **extra saving** now possible with the MPS. Profit by writing today!

*("Spot" or "continuous" print. Accurate cut off control can be provided for "spot" printed bands.)

Miller

WRAPPING & SEALING MACHINE CO.

14 So. Clinton St.

CHICAGO

SEPTEMBER 1939

89

MASS PRODUCED HOPPER BOX

(Continued from page 33)

make certain that the door will be able to close after it has once been opened for the removal of merchandise. For this purpose, a U-shaped glider of cardboard is inserted into each container and so positioned as to hold the contents away from the side walls and to form a slot, between liner and side wall, into which the door wing can readily slide. To protect the finish of the container during shipment and for re-shipment by the dealer, a simple cardboard sleeve is utilized.

Among the advantages claimed for the new container are lightness, low cost of fabrication, the use of a large proportion of standardized can making machinery, the possibility of utilizing lithographed metal to obtain decorative effects at low cost, and conveniences in handling and stacking.

Credit: Box and method devised by J. W. Simmons. Atlas containers manufactured by Mason Can Co.

ALL CARRY THE SAME POLISH

(Continued from page 54)

out removing them from the container. The black base is so molded as to incorporate a small receptacle for cotton as well as for emery boards.

Another type of ensemble is likewise made of plastic material. This unit houses small sizes of manicure essentials. The black base is molded in a manner which enables it to receive the various articles in snug compartments. Cellophane-wrapped cotton is held in place by means of a clip attached to the inner surface of the hinged lid.

Nail polish kits which can be tucked away in a corner of a traveling bag perform an admirable function provided that there is the assurance that the bottles and scissors will not come tumbling out of the kit to get lost amid dresses. Northam Warren provides that assurance by utilizing closing devices and package constructions planned to put an end to that doubt.

A case which utilizes no closing device, remaining firmly closed nonetheless through the spring action lid which snaps down tightly, is ingeniously fitted with a metal tray holding four bottles. This tray slides into upright position when the lid is raised and lies flat when the lid is closed.

A completely feminine set is distinguished by a Celanese crepe bag decorated with a needlepoint medallion. This rich looking purse snaps closed with a button-type glove fastener. Opened, a zipper slide fastener is revealed. When this is opened, a tray containing the Cutex preparations is discovered.

Credit: Kits designed by the Northam Warren Corp. Streamlined plastic manicure kit made of Textolite, a product of the General Electric Co. Plastic kit with small size preparations made of Durez and molded by Norton Laboratories, Inc.

50 YEARS OLD—AND STILL CHANGING!

(Continued from page 30)

In the company's new Christmas line, brilliant metal magentas, blues and amethyst combine with copper, gold and silver to strike a festive holiday note. Some of these new items are sprinkled with stars, while others elaborate the baroque motif. In some of these packages a new construction of reversible covers turns a completely closed package into a very novel open display.

Coincident with the repackaging is the introduction of a new counter display made in the form of an old-fashioned dresser, the base, two sides and back of which are of mahogany with glass used for the top and front.

Credit: Bottles, jars and metal closures by the Hazel-Atlas Glass Co. Plastic closures molded of Bakelite Polystyrene by Plastics, Inc. Labels by the Addison Lithograph Co. Face powder containers by E. N. Rowell Co., Inc. Gift packages by Shoup-Owens, Inc. Leather kit by Morocco Case Co. Display by Piraloid Displays, Inc.

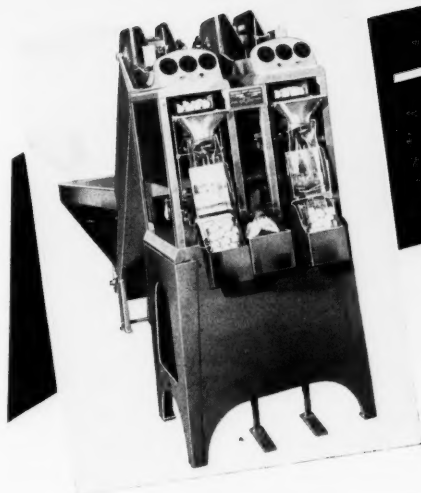
HO FOR THE BOUNDING BATH

(Continued from page 35)

woodcoverings. One kit, known as the "Nor'easter" set, offers soap and cologne. The platform of this gift package is covered with gold foil and is so designed and die-cut as to receive each of the items in a separate compartment. Another gift offer, the "Marine" set, utilizes the same type of box covering as the "Nor'easter," but the platform is roped off with cord to increase the nautical note.

Largest of the gift ensembles is the "Sea Chest." Simulated wood is employed once again with brass trim giving the container an appearance of sturdiness and authenticity. A real lock and key and rope handles further add to the illusion of an actual treasure chest.

Though the "Marine" line is the leader, Mr. Dearling has designed some additional gift sets for Wrisley which likewise capture the imagination. One set, known as "Saddle Club," adheres as closely to the equestrian as the "Marine" line does to the nautical. This men's set, consisting of shaving bowl, after shave lotion and talc, is boxed in a saddle brown set-up box with hinged lid. The shaving bowl is of chrome with a horse's head encircled by a horse shoe embossed on its lid. The bottles for lotion and talc are topped with chrome closures from which are suspended, by a leather strap, miniature



- GREATEST ACHIEVEMENT IN *Automatic* WEIGHING

FEATURES!

1. HANDLES DELICATE PRODUCTS—No breaking, crushing or marring. Handles even potato chips without injury!
2. EXTREME ACCURACY—This unit will weigh accurately to a single piece on many types of products.
3. NEAT PACKAGES—Method of feeding assures full, attractive packages. Fine particles screened out. Particularly important where transparent packages are used.
4. SANITARY—Products untouched by hand during packaging operation. A fact of tremendous importance to the buying public—a potent sales-stimulating factor for you.
5. EASY CONTROL—Radio type dials. A "twist of the wrist" and you're ready to go. Easily changed to handle different size packages.

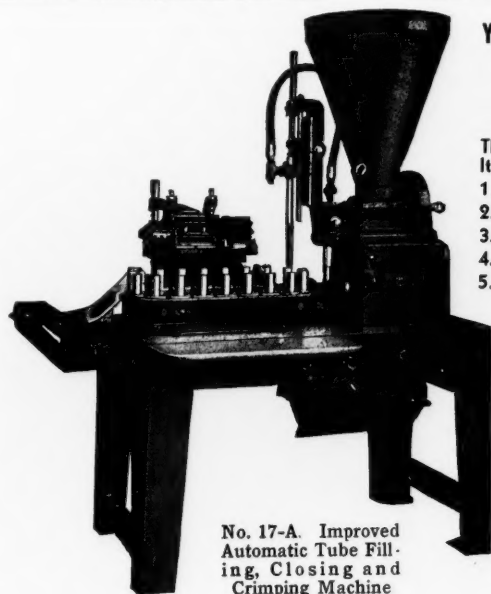
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Cookies.....	American Bakeries
Candies.....	Griggs Cooper & Co.
Marshmallows.....	Brock Candy Co.
Macaroni.....	De Martini Mac. Co.
Roofing Nails.....	Barrett Co.

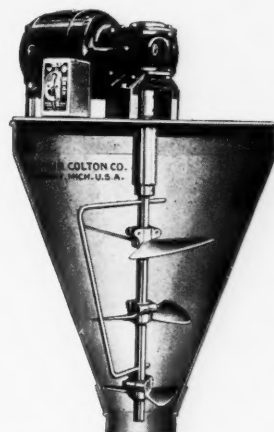


No. 17-A. Improved Automatic Tube Filling, Closing and Crimping Machine

YOUR IMMEDIATE ATTENTION IS CALLED TO THIS NEW No. 17 IMPROVED AUTOMATIC TUBE FILLING, CLOSING AND CRIMPING MACHINE for SEALING COLLAPSIBLE TUBES. TYPE "A" for PASTE. "B" for POWDERS. "C" for LIQUIDS.

The famous COLTON CLOSURE machine has been greatly improved and simplified. It now offers you these new advantages:

1. Motor is underneath, out of the way.
2. Equipped with REEVES drive for speed control.
3. New design filling head gives a positive free smooth action of nozzle.
4. Start and stop push button switch.
5. Two hand levers. One for starting the machine proper. One for stopping and starting filling mechanism.



Electric Drive Stirring Device as shown is recommended for materials that do not flow readily in our standard hopper.

All of these improvements—yet no increase in price. Write today for a sample tube and full information on this machine.

ARTHUR COLTON CO.

2602 JEFFERSON AVE., EAST

DETROIT

MICHIGAN

chrome stirrups. The stirrups rest over the labels which have imprinted upon them the product name with a horse's head as design motif.

A gift set designed to appeal to women is one which offers Wrisley's old fashioned lavender fragrance in bath oil, cologne and dusting powder. The cologne and bath oil are marketed in stock bottles dressed up with labels so rendered as to heighten the old fashioned theme and topped by copper closures. Bath powder is presented in a round container covered with a simulated tweed paper. The lid is of brass and bears a sun-burst design pattern. The articles are boxed in a set-up box with the simulated tweed paper covering.

Credit: "Marine" line—bottles by Carr-Lowrey Glass Co. and Foster-Forbes Glass Co., box coverings by District of Columbia Paper Mills, Inc. "Saddle Club" line—bottles by Swindell Brothers, Inc., box coverings by C. R. Whiting Co., Inc. All metal closures and fittings supplied by Chase Brass & Copper Co., Inc., except for metal stirrups which are supplied by the Waterbury Buckle Co.

MOISTURE PROTECTION FOR SALT

(Continued from page 80)

coating our round can salt labels. Long experiment produced a formula of this material which, in our opinion, has definitely provided the answer for all of the original problems of varnishing a round can label. Records of experiment show samples of some particular labels, when coated, have only 86 grams moisture diffusion per 24 hours as against 1330 grams uncoated. For a salt package, it can easily be seen a material of this sort is highly advantageous. It has proved economies over varnish, has created less sales resistance and developed a method unique in the coating of a label already applied to a round can. It has meant that a customer may receive 24-hour printing, labeling and packing service in the private label salt business and be assured of a moisture-proof, high-gloss label covering a high-grade can of salt.

Credit: Pliolite label coating material, The Goodyear Tire & Rubber Co., Inc. Labeling machine, Standard-Knapp Corp.

EASIER OPENING FOR OLD GOLDS

(Continued from page 78)

for retailing it. However, in the case of this highly competitive consumer item, there is the added and all-important stipulation that this, among other things, must be accomplished at extremely low packaging costs.

There are a number of reasons for this. The first, and most obvious, reason is the fact that the product must sell for a universally low retail price, yet is made from comparatively expensive raw materials. High-grade, unprocessed domestic tobaccos, for example, run as high as sixty cents a pound. Turkish tobaccos are even more costly. Secondly, the preparation of the tobacco for cigarettes involves the use of costly manufacturing methods and equipment. In addition, a Federal revenue tax of six cents must be paid by the manufacturer for each pack of twenty cigarettes.

One way in which Lorillard maintains production at a minimum unit cost is through a constant flow from raw materials to finished product. Although all the tobacco which goes into Old Golds must be aged for years, tobacco stock purchases are scheduled so as to provide an ample supply of ready-to-be-processed material at all times. The subsequent steps of stemming, mixing and careful blending of the various types of tobaccos; the heat treatments, moisture addition and shredding must all be coordinated. High-speed cigarette-making machines then transform the shredded tobacco into the finished product ready for packaging.

In the packaging itself, new equipment is constantly making greater packaging speeds possible, which in turn, contributes to greater efficiency.

Lorillard's package research has contributed much to its efficient and highly modernized packaging program. In order to have the most practical package for its purpose and to keep pace with packaging trends, Lorillard is constantly seeking ways and means for improving the Old Gold package. Laboratory tests have been conducted to determine the most efficient pack from the standpoint of resistance to moisture passage (both from within and without), rigidity and ease of opening.

A combination of these factors of research has been an important basis for the introduction of Old Gold's newest contribution to cigarette packaging, the "zip top," a development that further demonstrates that the cigarette manufacturers are truly package conscious.

WHIPPING UP HAT SALES

(Continued from page 66)

fastener, holds twelve hats, each rolled neatly in its individual carton. When closed on stock shelves or in storage, the dealer has a unit capable of holding a good portion of merchandise in a dust-proof container and when open for display, the same dozen hats are brought out front for inspection, while occupying but a small area of counter or window display space.

The sturdy container opens instantly to form a display with the inner surface of the lid so printed as to form an interesting panel when in upright, exposed position. A wooden mast—supplied as part of the merchandising unit—is inserted in the rear of the display, in provided

Gentle Reader...

During over 30 years of experience in designing, building and selling of various types of packaging equipment we have met with a generous measure of success. Circumstances have sometimes intercepted the rewards for patient development and honest endeavor. Happily, however, this formula has proven itself so conspicuously sound that we can today guarantee our clients the most modern approaches to completely efficient automatic operation in many important phases of packaging, i.e.:

**AUTOMATIC WEIGHING AND
FILLING, AUTOMATIC BAG
CLOSING (TEXTILE), AUTO-
MATIC BAG SEALING (PAPER)**

and

**AUTOMATIC SORTING, FEED-
ING AND APPLYING OF SCREW
CAPS**

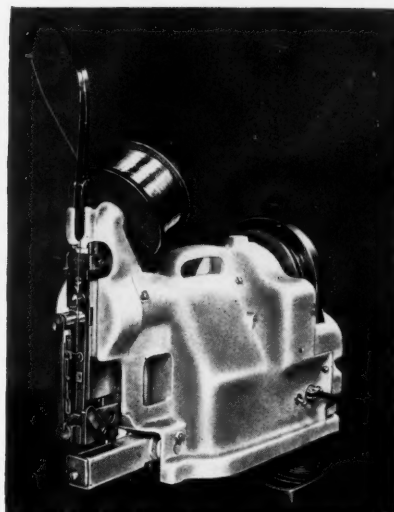


**CONSOLIDATED PACKAGING
MACHINERY CORPORATION**

1400 West Avenue

Buffalo, New York

THE NEW BOSTON PORTABLE BENCH STITCHER



When stitching filled bags, or attaching articles to cards, or setting up small boxes, you will often find it more convenient to bring this Portable Boston Bench Stitcher to the work to be stitched, rather than carry the work to the machine.

The Portable can be carried from one location to another, placed on a bench or table, attached to a light socket, and put in operation without delay. It is light enough to be readily carried and yet sufficiently heavy to remain in position while being operated. It is electrically tripped through a solenoid by a foot pedal which can be placed in any convenient position on the floor.

Stitches work up to $\frac{1}{4}$ " in thickness at speeds up to 215 stitches per minute. Has a 4 inch throat length. Uses No. 25 to No. 30 round wire. Crown of stitch $\frac{3}{8}$ " or $\frac{1}{2}$ " as ordered. A $\frac{1}{4}$ " crown may be furnished for No. 25 round wire only.

Ask for
further details.



DEXTER FOLDER COMPANY

330 West 42nd St., New York, N. Y.

BOSTON

185 Summer St.

PHILADELPHIA

5th and Chestnut Sts.

DALLAS—J. F. Carter, 5241 Bonita Ave.

SAN FRANCISCO—LOS ANGELES—SEATTLE—Harry Brintnall Co.

CHICAGO

117 W. Harrison St.

CINCINNATI

3441 St. Johns Place

slots, to hold the lid erect. This mast not only serves as a prop, but becomes an integral part of the display panel design, forming a part of a postal scale (printed in silhouette with an indicator only slightly raised) which serves as the central design motif on the display panel. With a hat perched on the upright, a graphic illustration of its light weight is thereby achieved. To demonstrate that the hat so proudly perched on the "scale" is likewise rollable and foldable, two die-cut sections, on the circular rim, hold hats in a crushed position. The balance of the panel design is given over to a clear presentation of price and the product name.

The individual cartons are of wedge shape of a simulated tweed design similar to the display box. The odd-shaped cartons fit snugly into the container in a fan-like arrangement. A partition divides the base of the master box into two sections, each section holding six cartons.

Each individual hat package is designed to aid self-help. Size is clearly indicated and a triangular shaped window permits a view of the hat within so that color can be noted. The rolled hat fits snugly into the carton so that a base to the package is not necessary and thus the shopper can easily pull out the hat to try it on. The cartons can likewise be utilized as pedestals for hats to form side display pieces for the main merchandiser.

An additional feature of the novel hat cartons is the re-use to which they may be put. For traveling, for storing in the club locker, etc., the carton may be used as a housing for the crushable hat.

The display-shipping-storage container is reported to have raised loud cries of welcome from hat retailers, though it has been available for but a short time. Its ability to present the roll-up hat in a manner which encourages consumer inspection and which demonstrates concretely the salient features of the product—light weight, economy and crushability—has caused dealers and consumers alike to indicate their approval for this type of hat merchandising in terms of increased orders and increased sales.

Credit: Display and individual cartons designed by Aage Wise and produced by Leo H. Fuller, Inc.

BUMP-PROOF SHIPPING ROLL

(Continued from page 31)

30 ft. can be an expensive matter. Drums travel up to 1800 revolutions a minute—about a mile of surface feet per minute. Belts have similar speeds. A rupture at a distorted edge will result in a strip ripping off a drum. A sandpaper belt is apt to break suddenly.

Not only does a damaged edge spoil work by scoring uneven streaks in the wood, metal or leather, but the workman pressing a sandpaper belt onto the material may be injured badly.

For several years the Behr-Manning Corp. experimented with various methods for protecting the edges,

testing them by shipments to the Pacific Coast and back to Troy, N. Y. Excelsior padding, commonly used, lacks the prime essential of rigidity. It crushes easier than the sandpaper itself. It either sifts or shifts to a bulge at the center, leaving the edge with only a wisp of protection and making the stacking of rolls end-on-end hazardous or impossible. Solid board discs and steel discs will slide and cut the wrapper. Tubes used for linoleum and some other products, if heavy enough, are too expensive.

Sixteen methods underwent tests, among them fiber-board caps, pasteboard and paper pads. A resilient bumper was needed thick enough to remove the edge of the sandpaper from the point of contact. About everything was tried but coiled steel bumpers. The ideal protection, said undaunted package researcher, Colin Ross, cudgeling his brain, would be an additional coil of sandpaper an inch or more thick—one on each end. What cheaper material would be equally springy in both directions? Why not try the kind of corrugated board which comes in rolls, and coil it to the same diameter as the sandpaper roll?

That proved to be the solution—a resilient end-pad, made by winding up a long width of corrugated board, sprayed with an adhesive, and afterward sawing it into discs desirably compressible, and also resistant enough to crushing to keep the edge of a heavy sandpaper roll from impact when dropped off a truck or box car.

The reward for this long task of package research is reported to be in the entire elimination of complaints. As many as eight freight handlings en route have proved the efficiency of the pads to protect the edges of the roll. For a 35-lb. roll, pads 1 in. thick are sufficient; on the heaviest roll a 1½ in. pad will absorb the impact when it is dropped on a concrete floor.

The illustration below, from the August issue of *Modern Packaging*, appeared without credit to the manufacturer of both the full size and the miniature containers. Both are manufactured by the Hazel-Atlas Glass Co.



*Klingrose
Offers
Printing and Coloring
Machinery
Adapted to Individual
Requirements
Multi-Color Gravure
Aniline, Combination
of these Methods*

KLINGROSE MACHINE CORP.

Plant: 461 Hamilton Avenue, Brooklyn, N. Y.

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SPEED - QUALITY - ECONOMY

*From Raw Stock to
Finished Product*

WITH

**WALDRON
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PRINTING
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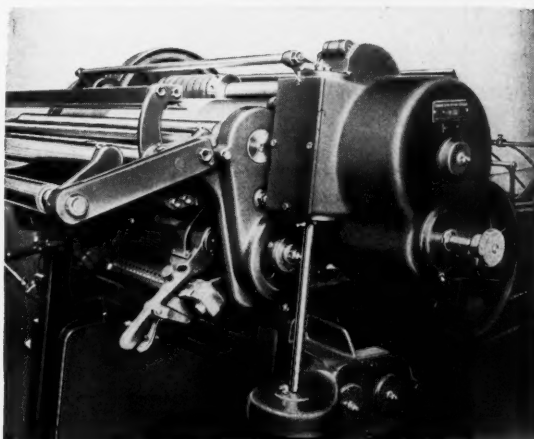
GUMMING
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To Improve Your Product - Write To

**JOHN WALDRON
CORPORATION**

NEW BRUNSWICK, NEW JERSEY

**NO MORE WASTE IN CUTTING
TO PRINTED REGISTER**



**DEPENDABLE ACCURACIES IN "SPOT SHEET-
ING" ARE NOW ASSURED THROUGH THE
NEW BECK**

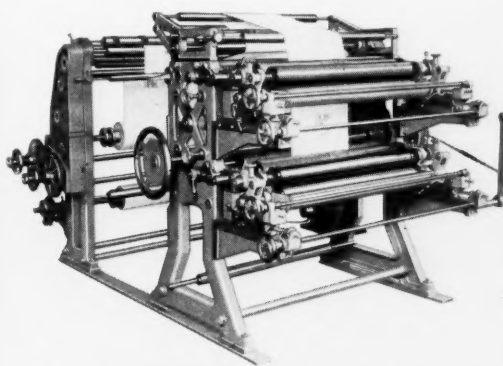
DIFFERENTIAL CUT-REGISTER CONTROL UNIT

For cutting to register, printed wraps, labels, etc. This unit is to be had on Beck Sheetters controlled either by hand or **ELECTRIC EYE**.

CHARLES BECK MACHINE COMPANY

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ANILINE PRINTING PRESSES

A specially designed unit for each and every purpose to which this new and popular process has been applied. One to four colors. Any widths. Units may be used with aniline inks, water soluble inks or soft oil inks.

Specially designed sheetter for use with our presses with speed up to 300 lineal feet of sheeted stock per minute.

HUDSON-SHARP

MACHINE CO • GREEN BAY • WIS

WORK IN PROGRESS

(Continued from page 41)

to 25 cents. The cost for 16 cartons over the cost packed in the $1\frac{3}{5}$ bushel wire-wound Bruce box is 21 cents, which is offset by 4 cents saving in freight due to the lighter weight of the consumer packages with their shipping containers.

Mushrooms

In the great mushroom producing area of southeastern Pennsylvania, the principal package continues to be the 4-qt. climax basket, commonly recognized as a grape basket. It is made with a board bottom and veneer is bent around sides and ends with veneer or wire handle. One wonders at the slow adoption in this territory of small veneer berry baskets or paper cartons. The crop amounts to ten or twelve million pounds.

Production has been developing vigorously in sections outside this area, notably in the middle west. A pint paper box, of berry basket shape, is widely used. Also, other forms of paperboard cartons are available. Cellulose windows display the produce which is packed from the bottom.

The marketing of mushrooms involves careful consideration of moisture and gas exchange problems.

Blackening frequently occurs if ventilation is not properly adjusted.

Other prospective developments include cranberries in 2-lb. units which will probably appear in the fall of 1939; also, Florida early potatoes in 5-lb. units and, possibly, Maine potatoes.

Problems of Design

Gilbert O'Brien has made a special point in his development work to design cartons as a definite fraction of standard market units. Sixteen small boxes of oranges packed in a corrugated shipping container are equivalent to a standard $1\frac{3}{5}$ bushel box. With apples, 20 of the 2-lb. cartons in a shipping container of corrugated board are equivalent to one regular 40-lb. box. Cartons of 6 grapefruit of the 72 size represent $\frac{1}{12}$ of a crate. Grapefruit of 46 sizes are packed 4 fruits per carton.

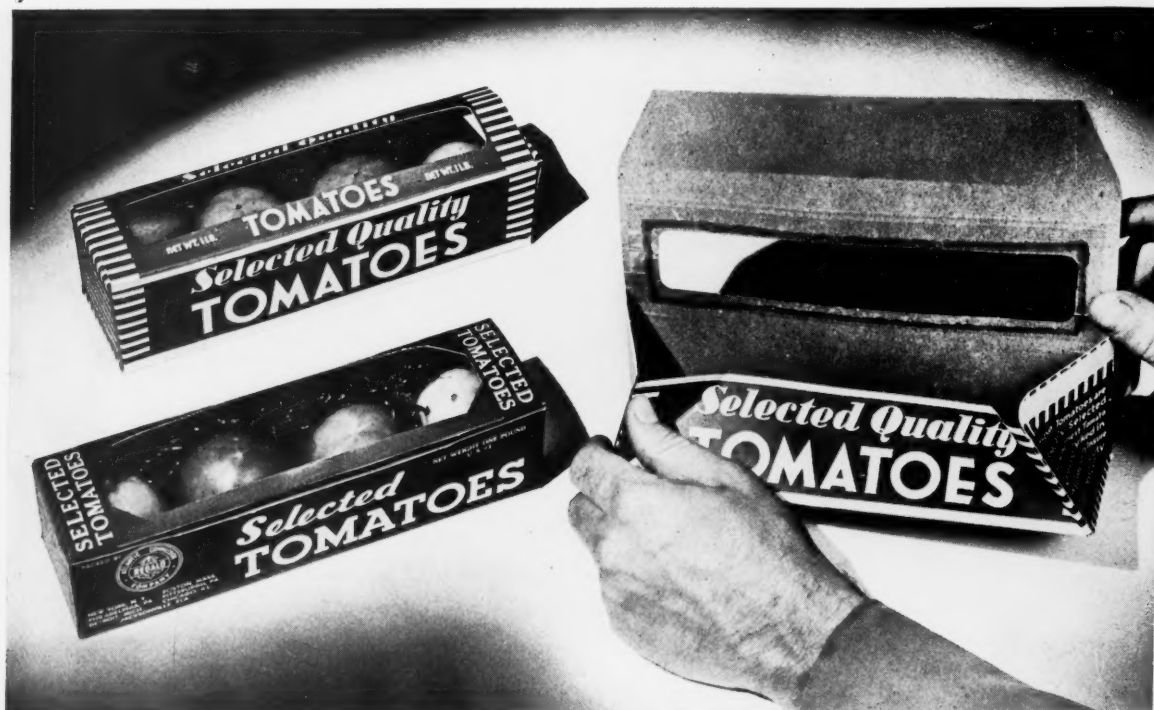
Choosing a size for a carton is no small problem. Apple boxes did not go across until 2-lb. units were devised. Now, there is call for a 3-lb. package. It is necessary to find the happy balance that sells maximum volume at each transaction and yet does not repulse with too large a unit.

Shipping Containers

Another problem in connection with consumer packs of vegetables is the design of shipping containers. Some things like the 15-lb. bags of potatoes are handled loose with a large increase in the cost of loading and unloading cars. With the tomatoes, citrus and mush-

9. Snap-up folding cartons with transparent cellulose windows are continuing to receive wide acceptance for select quality tomatoes. Two such containers are here shown, the upper being manufactured by the Hub Folding Box Co. and the lower by the Sutherland Paper Co. The manner of setting the box up prior to packing is shown at the right.

9



COPPERWARE AND COPPER FOIL

metal
show





**LOOK IN YOUR
SHIPPING ROOM
to see what
MAKESHIFT ADHESIVES
ARE COSTING YOU!**

They may seem to work right on the production line. They may even cost a few pennies less, though they seldom do. But, if you really want to know what you're paying for makeshift adhesives, look into the room where return packages and damaged goods are stored.

Many manufacturers have found that the assurance against such damage and returns which UPACO adhesives provide, is in itself a commanding reason for using no other materials. But, beyond this, UPACO users gain advantages on the production line . . . fewer rejects, faster production, lessened waste, lowered spoilage! And, to top it all, they command the constant service of UPACO'S famous research laboratories, for twenty years and more the leaders in developing special adhesives for special needs.

**TO LOWER PACKAGING COSTS
CALL IN THE UPACO ENGINEER**

UNION PASTE CO.

200 BOSTON AVE.

MEDFORD, MASS.

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- Maximum economy, efficient production and improved appearance of the carton or box can be obtained by using Acme stitching wire. Silverstitch (galvanized) and Colorstitch (in any standard color) eliminate the unnecessary expense and difficulties frequently experienced with ordinary stapling wires.

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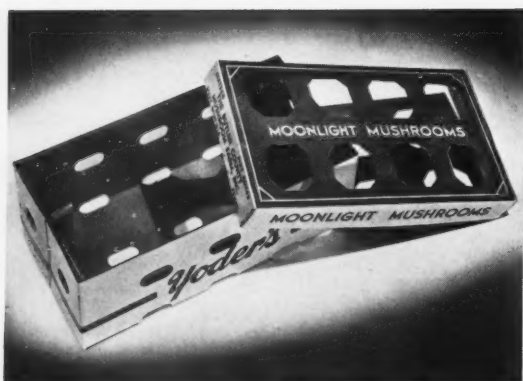
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Address.....

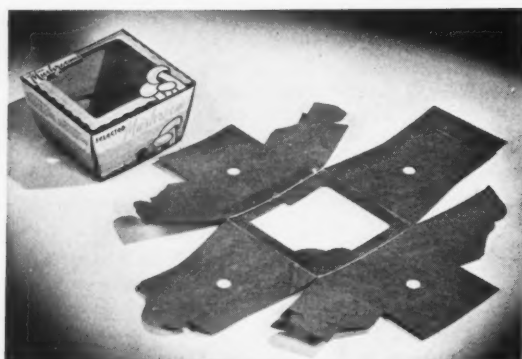
City..... State.....



10



11



12

10. A corrugated container with telescope lid and porthole design to match the windows of quart baskets is used as a dealer pack for 16 mushroom consumer containers. Designed and manufactured by The Ashtabula Corrugated Box Co. 11. Departing from the customary square shape, this mushroom container is designed in an elongated folding shape, with double locking lid. 12. A folding carton construction is utilized on this basket type container, designed to be filled from the bottom and therefore with the window integral with the blank. Manufactured by the Hub Folding Box Co.

rooms, shipping cartons of corrugated board are almost universally used. These must be rugged enough to stand not only rail shipments but handling in trucks which frequently are loaded with a miscellaneous assortment of produce and containers. At the same time, the container should not be too heavy for, in paperboard, stock is a relatively costly item.

Manufacturers have well in mind the necessity of standardizing dimensions to suit stock as it is made and the machines that are involved in their work. Little attention has been given to standardizing shipping containers so that they will carry a good many kinds of small units. Development of systems of this sort would offer a profitable line of research and would be a suitable activity for associations of manufacturers of paperboard containers.

Not much consideration has been given, apparently, to loading railroad cars without waste of space. These cars are pretty closely standardized as to dimensions. Trucks are variable but it is conceivable that uniform dimensions will be developed and then space economy and security in loading will be the rewards for the working out of these problems.

Argument Rages

Argument always rages up and down about costs of improved packaging and marketing methods. One element condemns consumer packaging and urges that it can never become general on account of cost. In support, a basic truth is cited, namely, that the great American consumer is a man of low income and, perforce, a thrifty buyer. It is true that countless housewives cannot afford to pay the difference between good usable foods of moderate quality and an extra fancy article of highly selected perfection. Neither, on the other hand, can they afford to pay the transportation and handling costs of lettuce leaves or carrot tops that must be trimmed away, or on tomatoes that have gone bad. This is one of the arguments of those who see a real future in consumer packaging.

In addition, we have the elimination of the labor of sorting and trimming by middle men. It must be borne in mind that it is necessary to pack only such goods as is likely to go through to the kitchen without passing beyond good usable condition. The grocer is spared the task of throwing away material that has been shipped clear across the country. Certainly, the housewife does not want to do it at the kitchen. This does not mean that the goods must meet the ultimate standard for color, flavor or the other attributes of highest quality. It is, at the same time, true that it is more and more difficult to sell low-grade goods even to trade that must make every penny count. After all, increased cost must be less than the realizable worth of the advantages gained.

Consumer packaging of fruits and vegetables involves many problems that are encountered only in small degree in the handling of manufactured products. Variability of nature's gifts, high perishability, and irregularity of supply are all serious matters. These greatly influence equipment and organization of packing plants.

The solution of these problems demands organization of sizable business and close cooperation with producers who must use the full resources of plant breeder and cultural expert. O'Brien has been well advised in beginning with the less perishable commodities, solving the simple problems first and later turning to situations that offer greater difficulty—such as peaches and lettuce.



DO YOU KNOW—

While there are no records to show that glue was manufactured commercially during the Middle Ages, the production of violins and other musical instruments indicates that fine glue was known and used during that period. Do you know that today Arabol manufactures modern vegetable glues that are efficient, economical and free from objectionable odors? For packaging, Arabol produces special, sweet-smelling, clean adhesives adapted for all types of wrapping, labeling and sealing by hand and machine. Consult Dept. P. about your special adhesive problems.

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Formerly Lusteroid Division of the Sillicocks-Miller Company
SOUTH ORANGE, NEW JERSEY

THE COMMERCIAL SIGNIFICANCE OF LIGHT ON GLASS PACKED FOODS

(Continued from page 43)

changes may be accelerated by heat when in the presence of oxygen.

Factors influencing the stability of Vitamin C in bottled and canned tomato juice have been summarized by various investigators. Sherman and Smith (16), Barnby and Eddy (2), Zilva (20), Kohman (9), Tressler and Curran (17) have all shown that oxygen is the principal agent responsible for the destruction of Vitamin C in tomato juice. Copper is found to be an important catalytic agent in accelerating its oxidation. In studying the effect of home canning and storage on the Vitamin C content of tomato juice, Daniel and Ratherford (4) as well as Hauck (8) have reported that exposure to light is not destructive to the Vitamin C content. Fellers and Buck (7) showed that the temperature of storage is a much more important factor than exposure to light as regards stability of Vitamin C in tomato juice.

2. Sauerkraut Juice—The conclusions reached by Rover (15) in his studies on sauerkraut juice packed in glass containers are substantiated by Ayers, Barnby and Voigt (1) in that the darkening of sauerkraut juice so packed was due to an oxidation resulting from oxygen incorporated in the juice or in the container headspace when sealed. When sufficient oxygen was left in the container to cause the darkening, an exposure to light accelerated this color change. When the oxygen content was reduced by removal of air, sufficiently to prevent the oxidation, then exposure to the light exerted no influence. Providing oxygen is present within the container, accessory factors such as heat and light, especially heat, increase the speed of harmful chemical reaction.

3. Grape Juice—Tressler and Pederson (19) found that pasteurized grape juice packed under high vacuum or in bottles containing substantially no oxygen undergoes very little change even when exposed to light at room temperature. The principal factor in the deterioration of bottled grape juice, however, is the oxygen in the headspace, so concluded because these changes took place regardless of whether the juice was packed in flint or colored glass bottles. Other factors such as temperature of storage and light exposure may affect the rate of deterioration, but the extent of same is determined by the amount of oxygen present within the container.

4. Grapefruit Juice—The progress made in the packing of grapefruit juice has been summarized by Tressler, Joslyn and Marsh (18) as follows: "These changes were thought to be due to light, but occurred even when dark bottles were used. Oxygen present in the headspace and dissolved in the juice, however, has been shown to be responsible for discoloration.

Flash pasteurization of deaerated juice and complete filling of the bottles with hot juice reduced this change to a minimum. To reduce oxidation further, potassium meta-bisulfite or sulfurous acid is added in amount sufficient to bring the concentration of sulfur dioxide in the juice to 50 parts per million. This aids in retention of Vitamin C as well as color."

5. Beer—Among those trained in the art of brewing, it has been almost traditional that light was the sole cause of so-called "skunky flavor" beer. Within recent years, however, the fact that oxygen plays a part in this off-flavor development in beer has come to be recognized. Demarkus (5), Laneau and Rosier (10), LeBeau (12) and MacKenzie (13) have all emphasized the fact that oxygen plays a definite role in governing the stability of beer and development of off-flavor in it. These workers have recommended bottling beer out of contact with air, that is, under vacuum or by replacing the air with carbon dioxide. Emslander (6) found that the presence of air increased the cold sensitivity of beer. Also cold sensitivity was increased by the action of light on filtered beer. According to Lawrie (11) most changes in the flavor of beer are due to the action of oxygen on the sulfur-containing ingredients. Even the presence of 1 to 2 cc. of air in a bottle of beer is capable of producing noticeable off-flavors. He believes that such changes are not due to the actinic rays of the sun, but that rays nearer the heat end of the visible spectrum may encourage the oxidation of these sulfur-containing ingredients.

Time does not permit us to make reference to the work of many others who have sought to differentiate between the action of sunlight as separate from the combined effect of oxygen and heat. It is sufficient to say that we have found, from a much more extended review of the literature, an almost unanimous agreement that oxygen and heat are the active agents responsible for food changes commonly attributed to light.

Summary and Conclusions

From the evidence reported herein, we have reached the following conclusions:

1. Laboratory results by some investigators, seeking to determine the effect of sunlight on food products packed in glass, have not always agreed with commercial packing results.

2. We find there are definite reasons for this lack of agreement as follows:

- (a) Commercial glass packages are universally protected from light by sealed shipping cases until displayed for sale.

- (b) Light meter readings show that while on retail display, these products only received from $1/200$ to $1/1300$ of the light intensity that they would undergo if exposed outside or on a roof top. These latter conditions are frequently used in laboratory investigations. One could not select a more non-representative sunlight exposure condition either as to intensity or duration in hours per day.

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(c) The growing necessity for a rapid stock turnover for profit and low inventory reasons has reduced the shelf exposure time to where light deterioration of glass packed foods is conspicuous by its rarity.

(d) There is likelihood of one inexperienced in canning practice to use very uncommercial packing methods in preparing test samples which lead to erroneous conclusions. The most common error in interpreting results is that in reporting changes caused by oxygen and warm storage as having been produced by sunlight.

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SHIPPING BOX CHECK CHART

(Continued from page 48)

To illustrate, let's consider a typical package that was subjected recently to a Check Chart rating. The ratings:

1. Information—100%—Complete.
2. Fitness—50%—Overlooks strong possibilities in point-of-sale display.
3. Design—20%—Definitely old-fashioned, hence not suited to product's market.
4. Simplicity—90%—Well planned construction. Easy to assemble. Easy to open.
5. Impression—20%—General impression vague, due to weak colors and old-fashioned design. Note tape covers part of name.
6. Attention—40%—Unusual message has some attention value, which is practically lost by weakness in color and design.

7. Color—10%—Weak. Due to color weakness, name is readable from a distance of only three feet. General color impression not pleasing.
8. Display—10%—Package has no display value, although product and market offer great display possibilities.
9. Merchandising—30%—Sales message should be effective for consumers as well as dealers.
10. Engineering—100%—Okey. Suitable for product. Tests satisfactory.

Adding the ten ratings together and striking an average, the Check Chart rating of 47 per cent was secured. Under "Recommendations," the report continues, "Product lends itself to point-of-sale display with accompanying possibilities for more effective merchandising. Modernize the layout. Change entire color combination to stronger, more suitable color values. Use side panels to make printed design more effective. Change style of box to Duplex shipping-display box."

It is claimed for the ratings that they mark a significant step toward scientific—rather than hit and miss—package analysis and design.

True, the ratings are arbitrary and subject to honest differences of opinion, but this unassuming white card at least supplies recommendations that will serve as a starting point for more logical discussion.

PIEMAN'S PROGRESS

(Continued from page 46)

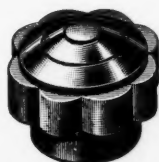
on the opposite face. In these instances, the colors are reversed and in stacking or pyramiding the alternating color effect makes a startling pattern.

The story would not be complete without mention of the doily design. Howard Johnson developed the roadside restaurant in a manner never before offered to the public. Instead of merely hot dogs, hamburgers, etc., the Johnson chain early in their career offered full course meals. Many of the dishes on the menu required cooking to order. The public, used to grabbing a quick bite at a "dog cart" and moving along the road in the tempo of present-day traffic, were in no mood to wait a normal amount of time for their food to be prepared. To hold the interest of the guest long enough, a doily was designed involving scores of figures sketched along the border showing scenes of canoeing, fishing, golf, with fantastic castles made of kitchen utensils, the cow jumping over the moon and little boys and girls playing, etc.

Even special dishes have been designed by Alcott, Thoner and Marsh, together with the disposable containers for clams, cold drinks, ice cream, etc. All are planned to make possible the proper presentation of delicious foods to the traveling public.

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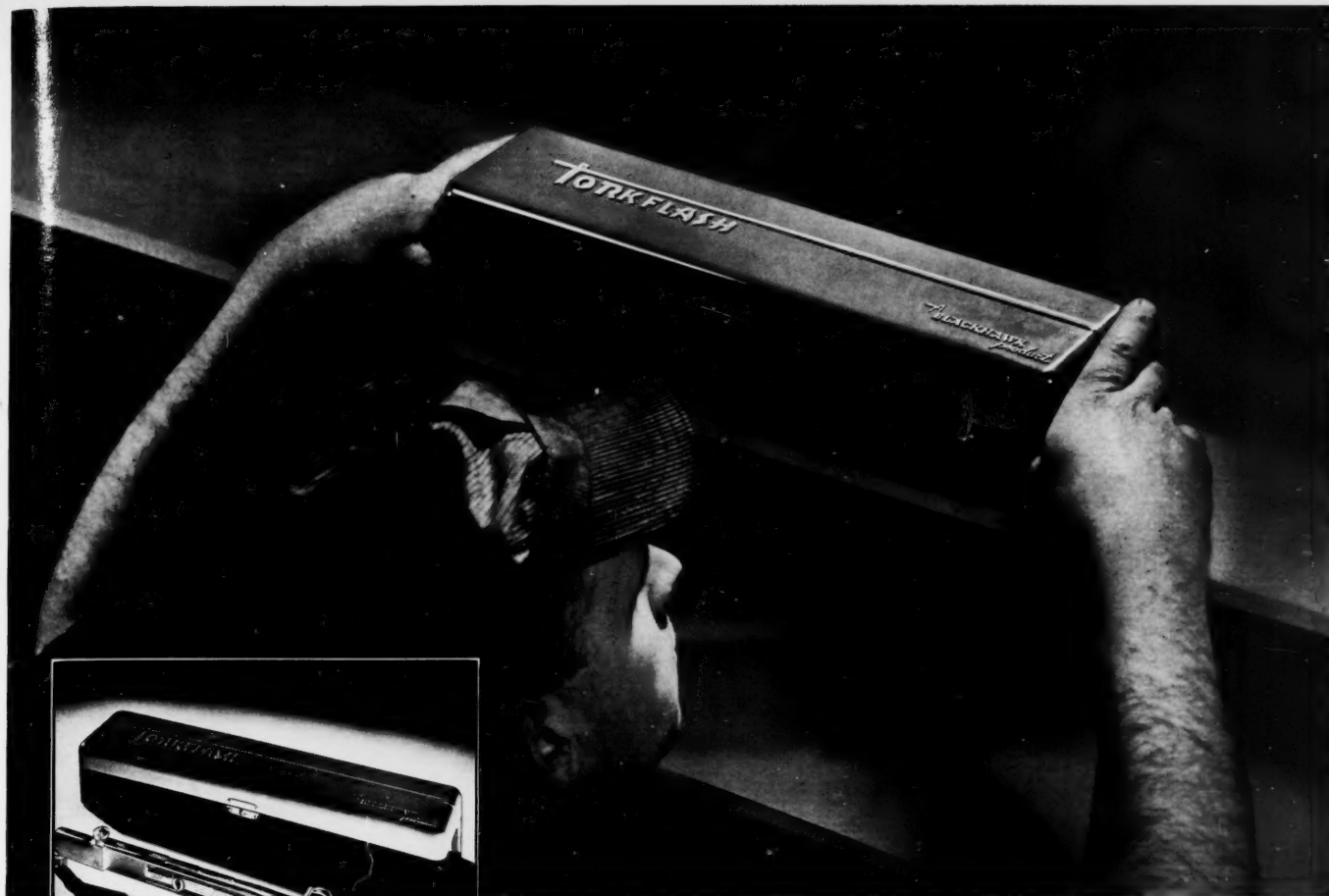
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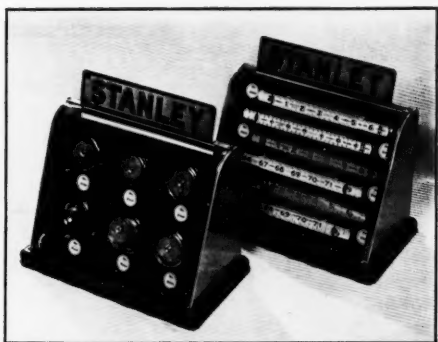
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